

# THE MILLING WORLD

AND

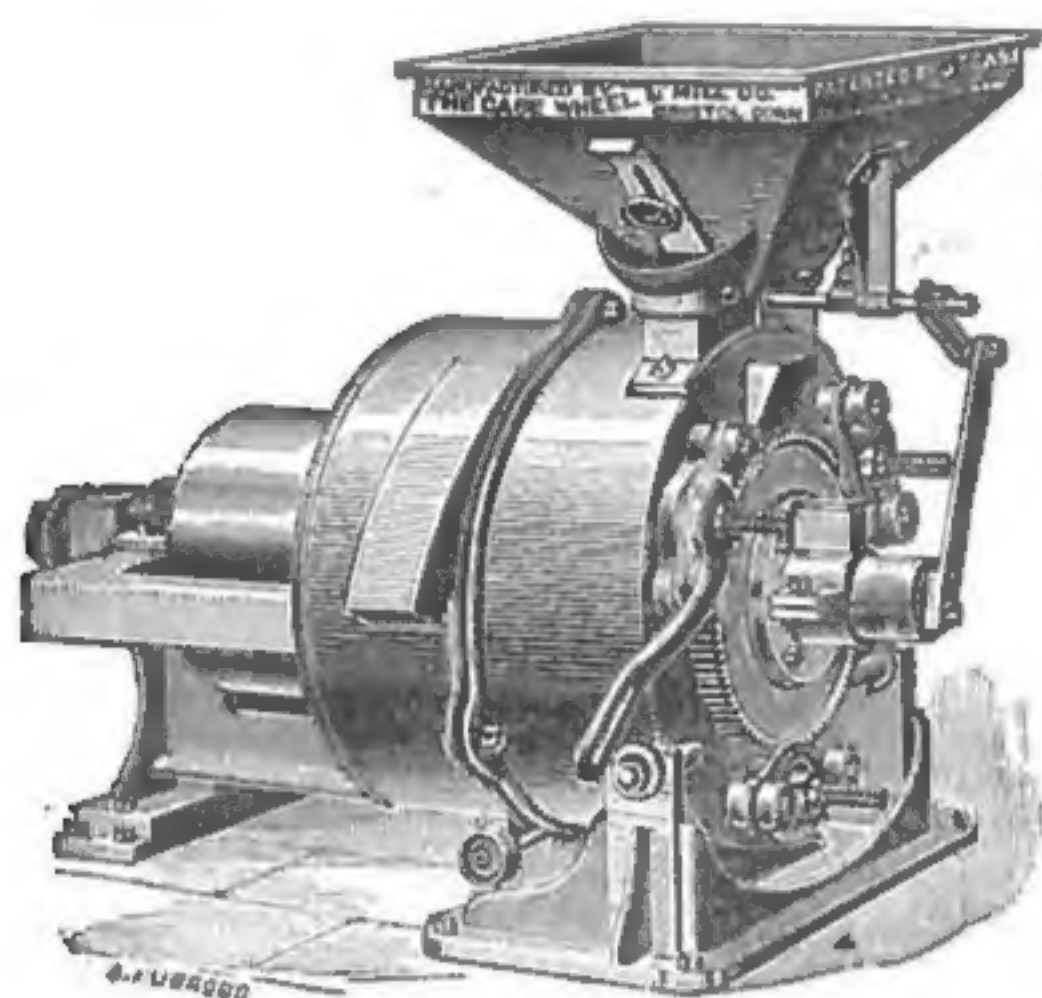
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXII. No. 13.

BUFFALO, N. Y., MAY 26, 1890.

\$1.50 PER YEAR.



## VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

(J. T. CASE'S PATENT.)

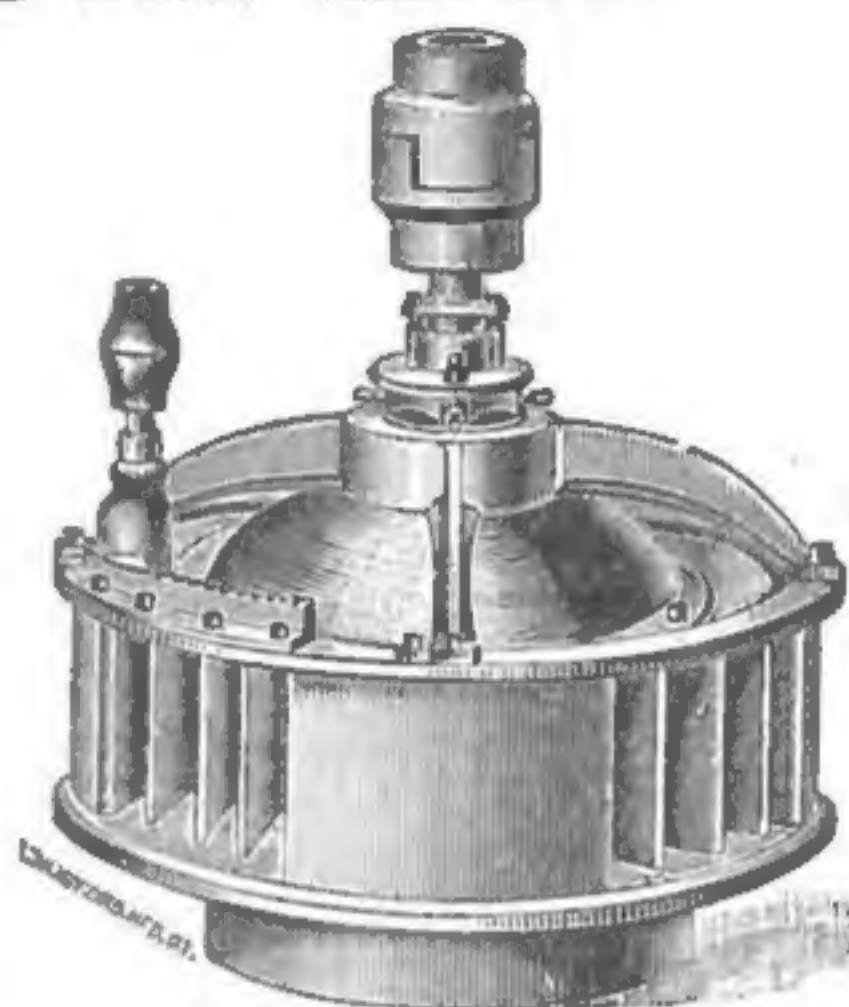
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.  
 "Superior to any mill in use."—GEO. WESTON, Bristol, Conn.  
 "The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.  
 "We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

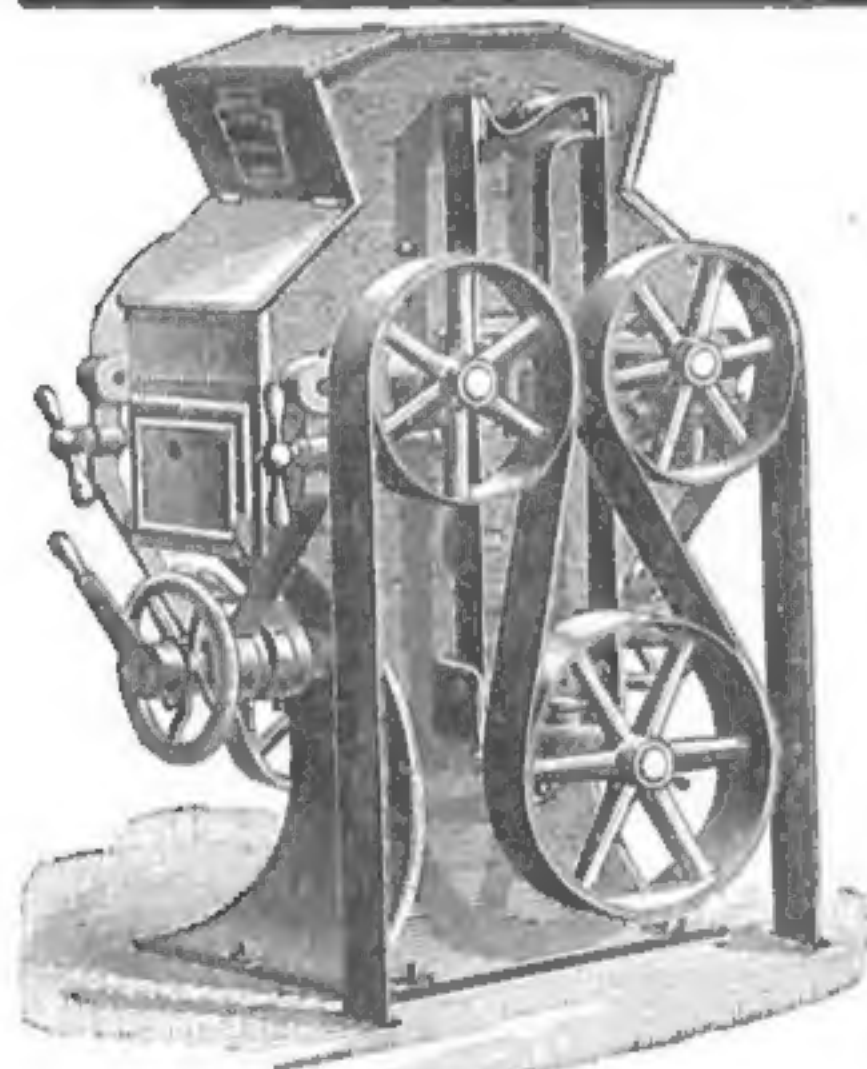
SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

## The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



The Case Wheel & Mill Co., Bristol, Conn.



THE "KEYSTONE."

HONEST WORK.

GOOD FLOUR.

PERFECT MACHINERY.

THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

FREETOWN, IND., April 7, 1890.

GENTLEMEN: We have had the mill you built for us in successful operation since November, 1889. We are glad to say that **WE HAVE ONE OF THE BEST 60-BARREL MILLS IN THE STATE.** Our flour will compete with any thing in the market; our percentage of low grade is very small and our clean up is as good as we ask. Your rolls, in our judgment, are superior to any thing on the market, being light running, easily adjusted and having other improvements which we fail to find on any other roller mill. Your "Success" Bolters, Centrifugal, Bran Duster, and in fact all the machinery gives perfect satisfaction. Every thing is smooth, cool and easy, making the least noise of any mill of same capacity we have ever been in when running. A farmer came in a few days ago and said that **our mill did not make any more noise than an easy running sewing machine.** We honestly believe that our line of machines has more points of excellence than any we have seen, which is evident from the fact that this is the second complete mill which you have built for us (or practically the firm), within four years, both of which are running, this latter being an improvement over the former one, and is what its name implies, a "Model Roller Mill." Wishing you the success you deserve, we are,

Yours truly,

TOBROCK, ALDENHAGEN & CO.

CLOSE FINISH.

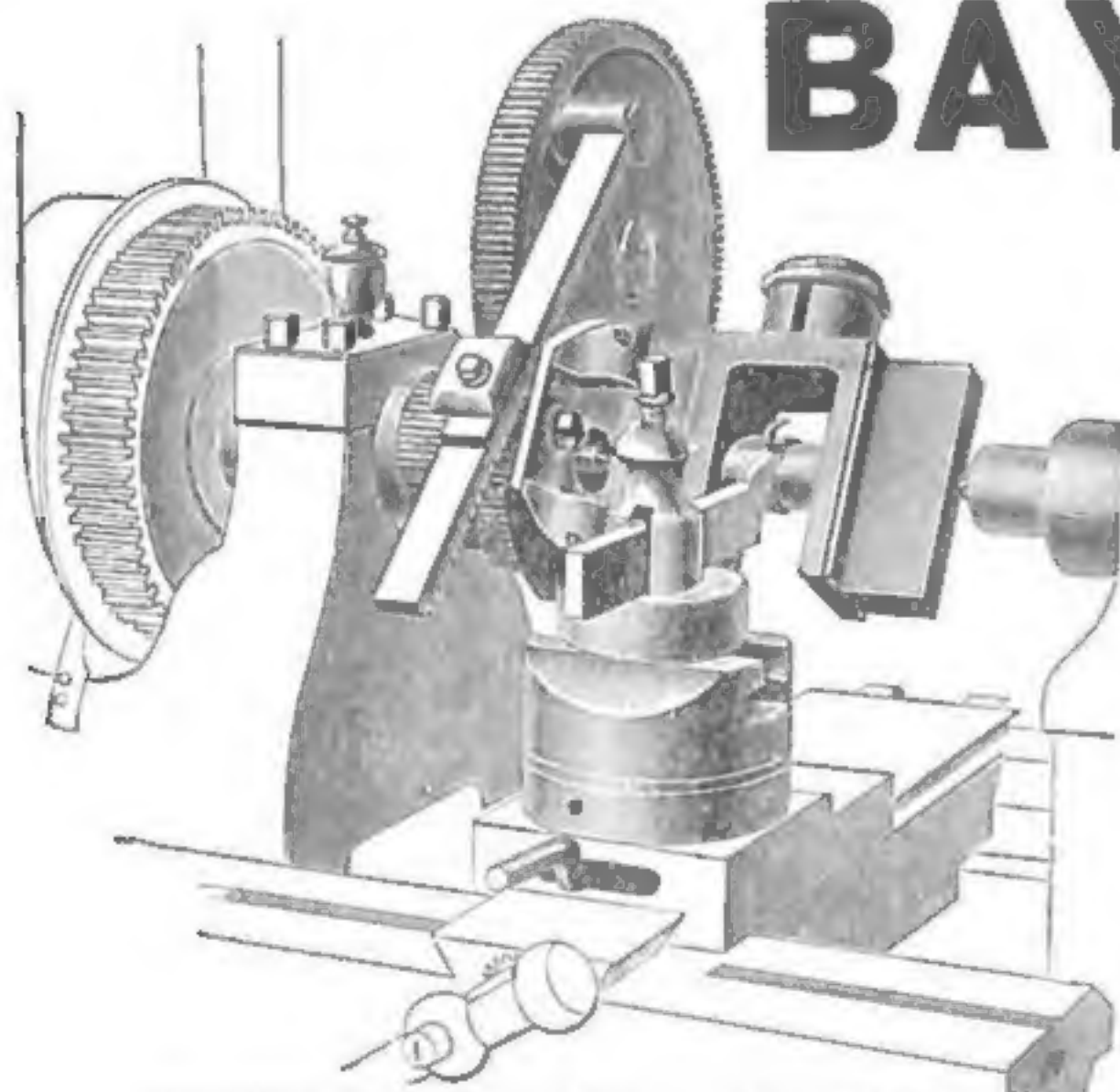
ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.

## BAY STATE IRON WORKS

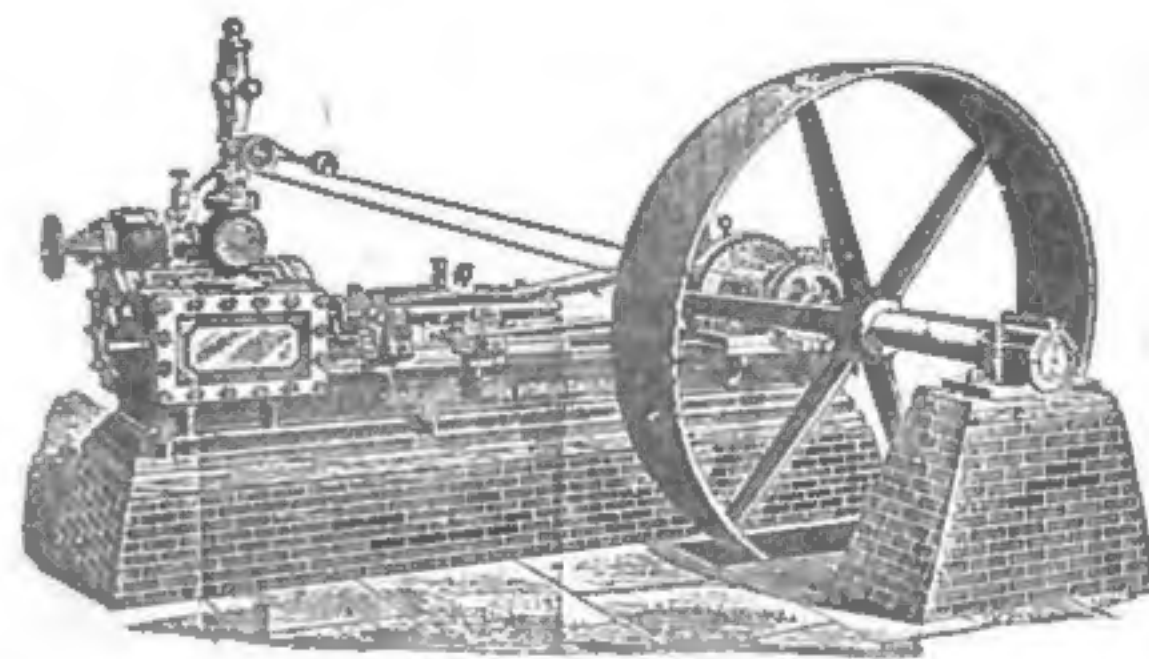
— MANUFACTURERS OF —

## Engines, Boilers & Hoisting Machines

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogue and Prices.



PATENT CROSS-HEAD MACHINE.



HORIZONTAL ENGINES.

Noble & Hall, Box 462, Erie, Pa.



# OFFICE OF CASE MANUFACTURING COMP'Y COLUMBUS, OHIO.

## The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

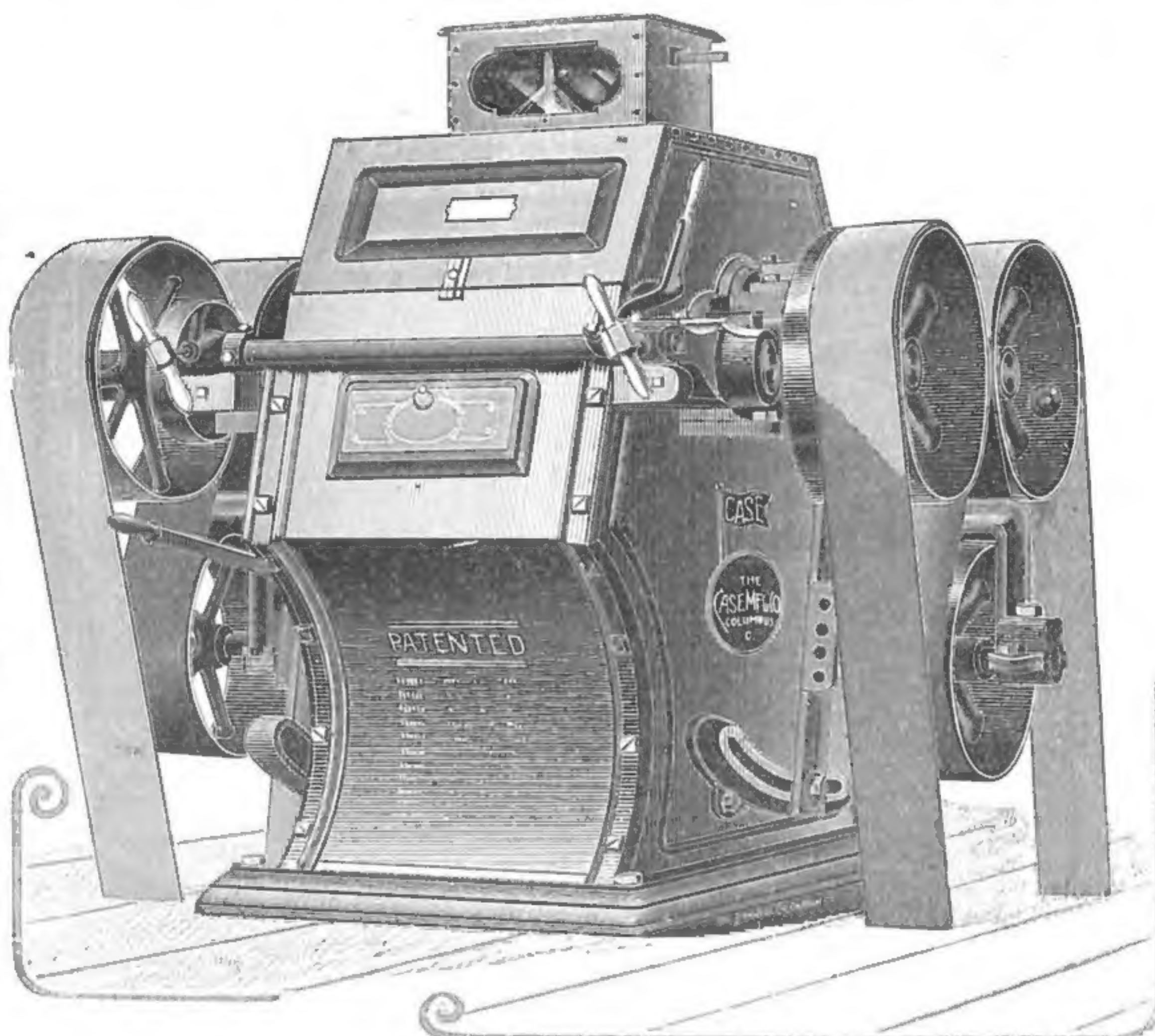
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.

## Please Read These Testimonials.

LITCHFIELD MILLING CO., MANUFACTURERS OF FLOUR. }  
LITCHFIELD, ILL., Sept. 14, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: We are in receipt of your favor of the 11th inst., and in reply would say we have twenty CASE AUTOMATIC FEEDS on our Dawson and Allis Rolls, and we are greatly pleased with them. We have tested the Feeds thoroughly on different materials, and find they work as well on bran and germ and other soft materials, as they do on middlings. We have derived great benefit from the use of them, and can cheerfully recommend them to the milling fraternity.

Yours truly,

J. C. EDWARDS, General Manager.

OFFICE OF A. J. MILLER, PROPRIETOR WHITE ROSE MILLS. }  
DEALER IN FLOUR, GRAIN AND MILL FEED. }  
METAMORA, IND., Nov. 19, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: Your Feed arrived O. K., and placed it in working order in a very short time. You have furnished me a daisy Feed. After regulating your Feed, it needs no more attention. It pays for itself in one week over the "Roller Feed" in cleaning up the

stock, and also insuring the superiority at same time. I forward you the amount of bill.

Yours truly, A. J. MILLER.

TREZEVANT, TENN., Feb. 27, 1889.

The Case Manufacturing Co.

GENTLEMEN: We have five double stands of Rolls with Roller Feeds on all of them. A short time ago one of your agents induced us to try one of your Automatic Shaker Feeds. We find that it works much better than the Roll Feed, distributing the material the whole length of the Roll. We heartily recommend your feeds to any one wishing to put in new machinery.

Respectfully yours, FUQUA, HARRIS & CO.

W. C. MANSEFIELD & CO., MERCHANT MILLERS. }  
CLEVELAND, TENN., Aug. 29, 1889.

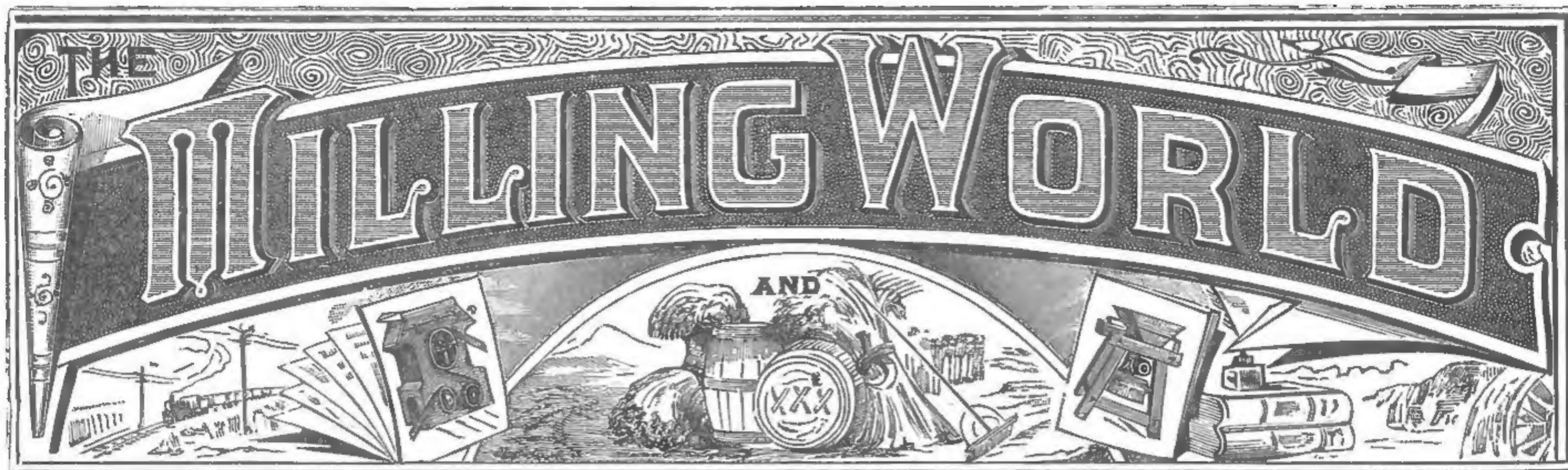
Case Mfg. Co., Columbus, O.

GENTLEMEN: If we were to build a hundred mills, we would not permit any other than the "CASE ROLL" to enter them. They are the best roll on earth.

Yours truly,

W. C. MANSEFIELD & CO.





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It must encourage the managers of the Millers' National Association to see that organization called the "National Millers' Convention" by one of the prominent commercial journals in New York. The association has been in existence long enough to be forgotten, a fact which speaks volumes for its usefulness and influence.

SINGULARLY enough, there seems to be no probability of a strike among the millers. Every other occupation than milling is subject to agitation. Either the flour-makers are prosperous and contented, or else, although not so happy as they would like to be, they are contented to let well enough alone. A great strike among the flour-makers would soon reduce the world to starvation, but the millers show no inclination to abuse their undoubted power.

CERTAINLY the millers of Ohio, Indiana and Michigan are to be complimented on the success of their Tri-State convention, recently held in Fort Wayne, Indiana. The attendance was quite large, and the representative millers of the three important States took active part in all the deliberations of the convention. Such meetings, with the free intercourse assured, can not help benefiting the millers, and we hope to see local organizations multiplying rapidly among the flour-makers. Thorough local and state organization will pave the way to a valuable national organization that shall include every important section from Maine to California, and from Washington to Florida. The milling interest, handling over \$400,000,000 yearly, is too important an interest to be allowed to hang at loose ends, with one section hostile to another, and each cutting the throat of every other. It is one of the staple interests of the country, and it should be organized to look after its own interests in every particular.

AUTOMATICALLY sprinkled fire-risks will soon be very unpopular among insurance companies, particularly when the risks are flouring-mills, if "sprinkled" mills go on burning down, or up, like those in Winona, Minnesota. Both the great mills burned in that town were equipped with so-called "automatic sprinklers," and precious little good they did when watchfulness relaxed and carelessness took its place. Both mills went up in smoke so freely that the influence of the mighty sprinklers was scarcely perceptible. Doubtless the insurance men will soon refuse to give "sprinkled risks" any better rates than risks without sprinklers. It should not be forgotten, by either insurance men or mill-owners, that flouring-mills are now, always have been, and always will be, exceedingly burnable establishments. "Sprinkled risks" and "moral hazards" are recognized by insurers, but they have completely ignored the "carelessness risk" and the "negligent hazard," two very potential agencies in causing fires. Carelessness is bad in a mill, and it will upset all the finest calculations of owners and underwriters forever.

SENSATIONAL newspaper reporters and editors are charging the low price for grain and other produce to the protective tariff, to Indian and other competition, and to the bucket-shop and board-of-trade produce gamblers, but the solid fact remains that the depression is directly caused by a supply

of produce far in excess of demand. The "successful" grain and other gamblers are those who simply succeed in finding out very nearly the actual supply, who either get accurate information and reason correctly from it, or make a shrewd guess and base their actions upon it. They know that so much grain is an absolute necessity, and as the quantity in existence dwindles to that necessary quantity, prices go up, and in proportion to the excess above that quantity prices go down. It follows that the real making of prices depends upon actual and widely known conditions more than upon "manipulation" by gamblers. It would trouble an opponent of the gambling fraternity to prove that gambling in itself could for months keep the price of wheat, or of any other cereal, far above or below a normal figure. Gambling in grain is bad, vicious, immoral and detestable, but its actual effects upon prices are grossly exaggerated. Handling "paper wheat" is about as capable of really making the permanent price of actual wheat, as poker-playing and safe-cracking are capable of making the price of wood pulp and chilled steel. The gamblers themselves are as afraid of accurate knowledge of crop conditions widely published as the father of lies is afraid of truth in any degree.

On the 2d day of June the works of collecting statistics of manufactures for the report of the Eleventh Census will be inaugurated throughout the entire country. The value of this report must depend wholly upon the accuracy and thoroughness with which manufacturers answer the questions propounded. The personal interests of every manufacturer are involved in the character of the report on manufactures. It will be quoted for the next ten years as the official announcement of the *exact* industrial condition of the country, and will be the basis for any future legislation that may be enacted in regard to the wants of our people, whether engaged in agricultural or mechanical pursuits. Therefore it is of vital importance to each manufacturer that an accurate report shall be made. The Superintendent of Census has taken every possible precaution in the preliminary work to make this census complete and satisfactory, and the earnest co-operation of those engaged in productive industry is all that is now necessary to secure valuable results. Every manufacturer should bear in mind that his answers to the questions relating to his business are held strictly confidential, are not disclosed to any competitor or to other persons, and are not used by the government as predicate for the purposes of taxation or license, or in any way adversely to affect his individual business. This assurance is printed on each schedule over the signature of the Superintendent of Census. The expert special agent in charge of this branch of census work, Frank R. Williams, has personally visited the principal manufacturing centers and consulted representative manufacturers, the publishers of trade-journals and practical business men generally, for the purpose of ascertaining the proper scope of the inquiry for each branch of manufacture. The questions contained in the census schedules are those suggested by the manufacturers and other persons most interested in the progress of the country, and they cover ground absolutely essential to the proper presentation of its industrial conditions and resources.



# The DAWSON ROLL WORKS CO.

## FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

# Dawson Roller Mills

—AND FURNISHERS OF—

## CHILLED IRON ROLLS

WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND  
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.

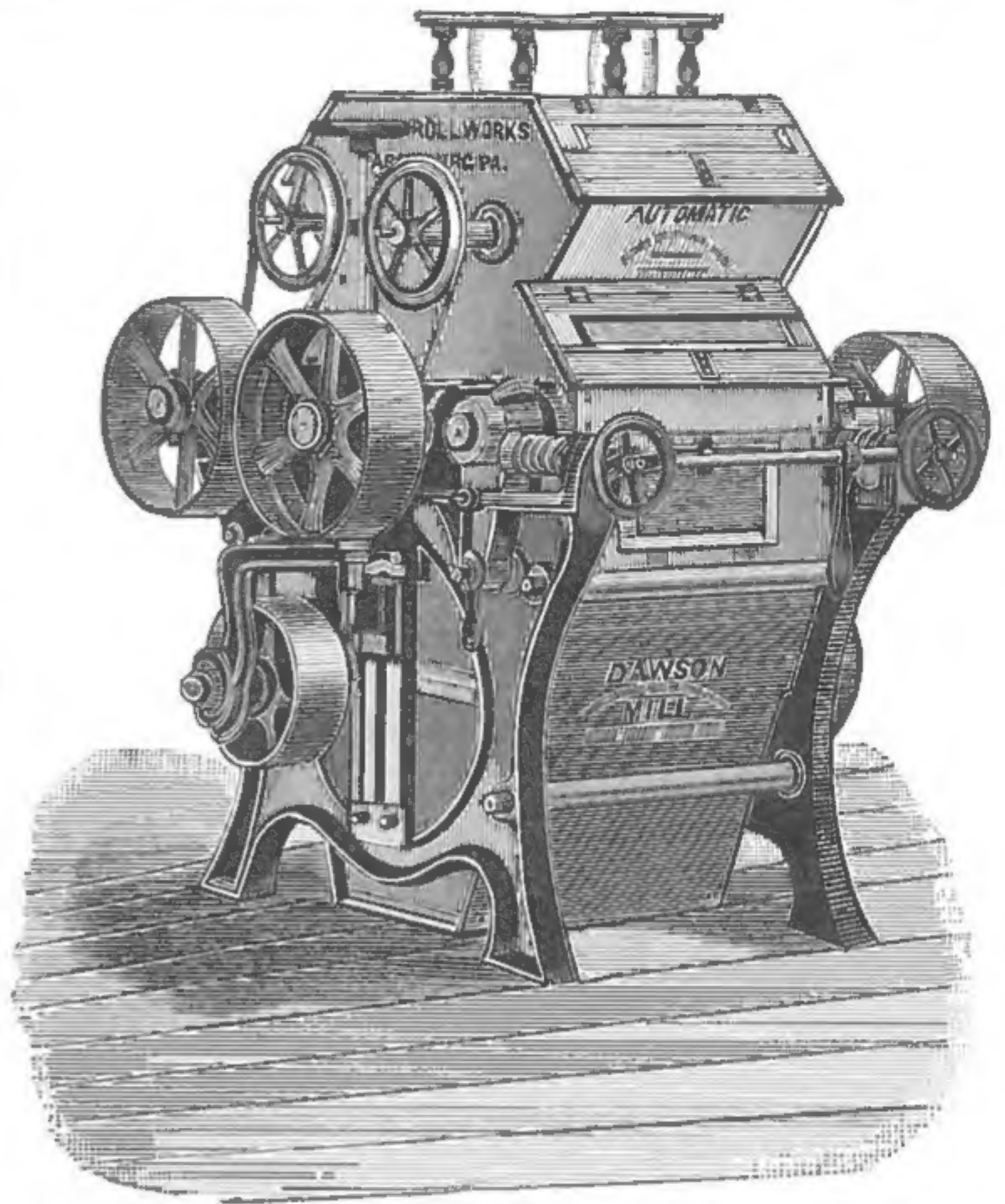
We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.

# DAWSON ROLL WORKS CO.

South and Short Streets,

HARRISBURG, PA.



# The Cowles "Reliable" Sectional Wood Pulley



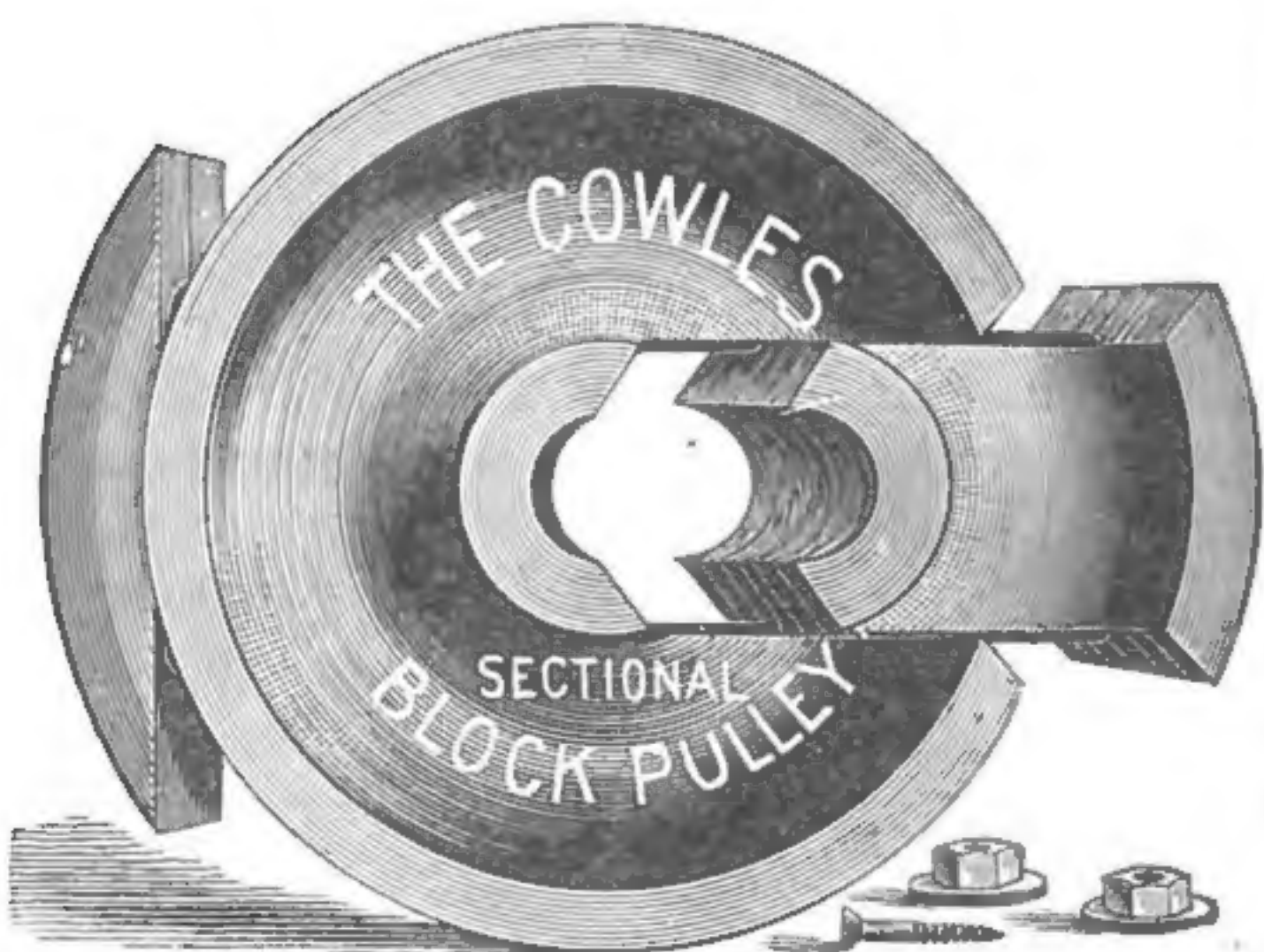
Web made of several layers glued together with grain crossing, and faced up on both sides. Iron flanges securely bolted to web. Rim put on after web has been trued up. Web and rim turned on inside and face, making perfect running pulley. Rim supported entire circumference. Positive self-gripping device for securing pulley to shafting, which is self-centering, and can not slip with wear.



A wooden rim pulley transmits from 30 to 50 per cent more power with same belt than an iron one.

Two-thirds lighter than iron, bearings will wear longer and the expense for lubricant will be less.

Having solid web, there is no air resistance. The "Reliable" can be placed on shaft or position changed in one-fourth the time required with any other pulley.



EDWARD GERMAIN, SOLE MANUFACTURER, SAGINAW, MICH., U.S.A.





PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,  
Over Bank of Attica.  
McFAUL & NOLAN, - - - PROPRIETORS.  
THOMAS MC FAUL. JAMES NOLAN.

#### SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.  
To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.  
Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

#### ADVERTISING.

Rates for ordinary advertising made known on application.  
Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.  
Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

#### EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.  
Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.  
This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.  
Address all communications

**THE MILLING WORLD,**  
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

#### SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

#### SITUATION WANTED.

Head miller with over 20 years experience want to make a change this spring. Address, A. MILLER, 87 Weaver Alley Buffalo, N. Y. 4t

#### SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 8 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

#### FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 6tf

#### FOR SALE.

One of the best paying 65-barrel roller mills in Nebraska. Nearly new, and in a locality producing a big surplus of excellent wheat. Address, A. C. PUTNAM, Chadron, Neb. 1114

#### PARTNER WANTED.

A man with capital to take an interest in a new 50-bbl. Roller, Flour and Feed mill. First class water-power. Every thing entirely new and in first class running order. A practical miller preferred. For further particulars address BILLINGS, RED-HEAD & CO, Avoca, Steuben County N. Y. 1215

#### FOR SALE.

A five run stone mill, with five water-wheels. Building 40x54, with five floors. A never-failing water power on Flint River, about 200 feet from R. R. track. Property worth \$15,000. Will sell for less than half that amount. For particulars call on or address RODGERS BROS., Genesee Village, Genesee Co., Mich. 1013

#### MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.  
One 20-Inch Under-Runner Portable Mill, French Burr Stone, capacity 10 to 12 bushels per hour; new, best make.  
One 14-Inch Vertical Feed Mill; best make, new, a bargain.  
One No. 6 Dustless Separator; new, a bargain.  
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.  
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.  
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.  
One No. 2 Purifier. New. Best make. A bargain.  
One 20-Inch Portable Mill.  
One 18-Inch Double Gear Portable Mill.  
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

## FOR SALE CHEAP.

One 36-In. Iron Frame Portable Mill, French Burr Stone, Used about 2 months.  
One 20-In. Vertical Mill, French Burr Stone, Used about 30 days.  
Three Pair 42-In. Old Stock Feed Stones.

FOR PARTICULARS ADDRESS,

**SAMUEL CAREY, 17 BROADWAY, NEW YORK.**

#### VALUABLE ENGLISH PATENTS FOR SALE.

THE COCHRANE ONE BELT DRIVE.

The patents for England issued to the late W. F. Cochrane for improvements in roller mills. Address, J. V. TEETZEL, Hamilton, Ontario, Canada. 1316

#### FOR SALE OR EXCHANGE

For water-power mill, two good farms 24 miles west of Richmond, Va., in Powhatan county, two miles from railroad, same distance from store, post office, mills, &c. Good buildings, plenty of water and fruit, &c. Address, H. L. AVERY, Hadley, Pa. 11

#### FOR SALE, EITHER ONE CHEAP.

A circular saw planing and feed mill, 90 acres of good land, two houses, one cost \$1200, best water power in county. 42 H. P. Turbine wheels. Three miles east of Ashtabula, O.

#### OR,

Short systm full roller mill, capacity 2½ barrels of flour per hour, three grades. Buck wheat rig with Cranson shucker. Feed stone, &c. 40 H. P. Erie engine; locomotive boiler, all nearly new, on Main street, Ashtabula, O., two minutes walk from Post Office. Big retail trade. For particulars enquire of L. B. HOWARD, Ashtabula, Ohio. Box 488. 1013.

Late reports on both spring and winter wheat conditions are very confused. Enough is proved to show that the season is very nasty and backward, and that a short wheat crop is inevitable, judging from the present situation.

NOTWITHSTANDING the daily complaint that there are too many flouring-mills already in existence in the United States, important additions to the number are being made every week. Of course many of the new mills are only "small" plants, ranging in capacity from 30 to 200 barrels a day, but even a 30-barrel mill means an output of 9'000 barrels a year, and that output means just that much less work for the mills already existing. As the mills now running have a capacity for grinding at least 500,000,000 bushels of wheat in a year, the increase in capacity made by each new mill must bring about a less and less profitable state of affairs for the fraternity. Over-competition means a benefit for the public at the expense of the anxious competitors. This is one side of the question. Another important point is the value of the new mills to the communities in which they are built. They are important additions to the industries of a section, and if they do cut off the markets of their section for the older mills in other sections, they still serve a good end by putting money in circulation at home that has been sent away from home heretofore. We are not inclined to view the multiplication of flouring-mills as an evil that ought to be checked. Every section that has grain should have mills to grind for home needs, at least to a certain extent. Such a development may be unpleasant to the "big millers" of the "great milling centers," but it seems to be inevitable, as things are now going.

BRITISH free-traders have always professed to feel very sure that free-trade would soon prevail throughout the civilized world. Recently they have begun to take a gloomy view of the prospect, and one of their most prominent men, the celebrated Gladstone, in a recent address before the Cobden Club, the great English free-trade propaganda, made some admissions that must have sent blue chills cavorting down the spinal columns of all faithful worshipers of the genuine Moloch of British free-trade. Mr. Gladstone said that free-traders must recognize with great disappointment how much ground has been lost by their doctrine within the last twenty-five years. Militarism, which lies like a vampire over Europe, is responsible for much of the mischief, but not for all, because free-trade has receded in countries where militarism does not prevail, in the United States and in the British Colonies. Protection is applied now in America, not only to goods, but to persons, as is instanced by the treatment of the Chinese. The great republic has never accepted the doctrines of free-trade. At one time there was a kind of qualified progress toward them, but this being checked, opinion has become actually retrogressive. Still, the growing strength, activity and clearness of conviction of the free-trade American party give a favorable promise of ultimate triumph at the polls. On looking over the world, the prospects of free-trade are certainly not encouraging. In this doleful wise the great British statesman admits the truth and attempts to extract the warming, cheering sunbeam of hope and courage from the frigid emerald cucumber of admitted defeat and retrogression. These be troublesome days for the free-trader!



## PROBLEMATIC GAINS.

A. B. SALOM.

PURBLIND observers and insincere demagogues claim that "labor is winning its battle all along the line." The end of the strike in Chicago is heralded abroad as "a magnificent victory for the 8-hour movement." Every local strike that comes to an end, by concessions on both sides or by utter defeat for the strikers, is called a "most encouraging gain for labor." With the regulation "whoop" and "halloo," with the invariable disregard for facts and figures, and with the true demagogic carelessness concerning consequences, that characterize the vicious, the thoughtless, the ignorant, the insincere, the utterly dangerous quacks who pose as "the true friends of labor," and who encourage any and every sort of folly perpetrated by professional agitators, every move made by labor, whether forward or backward, is published as "progress." According to these insincere enthusiasts, the May Day manifestation was a "complete success," the "8-hour battle has been won," and "wronged and defrauded labor has met and defeated grasping, avaricious, soulless and conscienceless capital."

Observers who prefer facts to fancies, realities to imaginings, and a study of consequences to a blind disregard of the future, will turn from the insane vaporings of quacks to the careful contemplation of the facts that go with the battle and of the results likely to flow from the so-called "victories." The first thing that strikes the student of affairs is the wide difference between the facts and the claims of the agitators. The end of the Chicago building-trade strike is called a "victory" for labor. Is it? Read the lesson of the cold facts. The 6,000 carpenters who struck were working 10 hours a day, receiving 35 cents an hour, or \$3.50 a day. The result of their "victory" is that they shall work 8 hours a day, at 35 cents an hour, up to August 1, 1890, when they are to receive 37½ cents an hour. For over-time they will receive 52½ cents per hour. How great is the "victory" here? These men were receiving \$3.50 a day. They struck for an 8-hour day with 10-hour pay. Their "victory" secures them the 8-hour day, but for three months they will receive only 8-hour pay, and after three months they will receive 2½ cents an hour more than they received when working 10 hours a day. They were receiving \$3.50 a day. Their "victory" cuts them down to \$2.80 a day for three months, and to \$3 a day after three months. This may be "a magnificent triumph," an "absolute victory," and so on through the list of demagogic terms, but it looks to a dispassionate observer like the opposite.

Contest and results imply costs. What has been the cost to the Chicago carpenters of their great "victory"? The cost has two phases, a past and a future. The past cost is computable. The 6,000 carpenters lost 35 days of labor, a total of 210,000 days of work, worth, at \$3.50 a day, just \$735,000. Along with this loss went nearly twice as much, lost by those connected with the building interest in other capacities. The total loss in Chicago in this one line is set down at \$2,000,000 in hard cash. How long will it require for men, who formerly received \$3.50 a day, and who now receive \$2.80 and \$3 a day, to make up for a loss of \$735,000 directly and for an additional \$1,250,000 indirectly. This is an interesting question for the purblind fanatics who are vaunting the Chicago change as a "victory." Look at the situation in another light. Counting the building season at 200 days a year in Chicago, these 6,000 men would perform 1,200,000 day's work in a year. On the 10-hour and 35-cent basis they would earn \$4,200,000 in the building season. On the 8-hour and 37½ cent basis the same number of men will do a total of 888,000 days' work and receive \$2,576,300 for it. Thus the "victory" deprives them of 312,000 days' work and \$1,623,600 wages.

Perhaps the demagogue may advance the argument that the shortening of the day of work will compel the employers to provide for "over-time" enough to supply the deficiency. In that case the laborers will receive 52½ cents per hour, instead of 35 or 37½ cents, for the 312,000 days' deficiency. That would be a decided gain, of course, but the employers will never pay 52½ cents an hour for "over-time"

forced upon them by this "victory." They will simply "push" things during the 8-hour day, increasing the number of employees so that they will accomplish all the requisite work inside the 8-hour limit. Naturally enough, this probable action by the employers will induce resentment in the employees. Other strikes will be necessary to win other "victories" to confirm the results of the present "victory." The agitators will never lack for a cause for striking, so long as they can delude the laboring men at whose expense they agitate, and from whom they extort large sums of money, giving nothing in return but loss, misery, disaster and discouragement.

Other considerations crowd upon the observer of this peculiar victory. Suppose it to be admitted that labor in Chicago and elsewhere really succeeds in adding 20 or 25 per cent. to the cost of building and of general production, what does labor gain in the end? Take a house, for example. The chief cost of the house is the wages paid to the labor employed in building it. A house rents for \$200 a year. New arrangements made for and by labor increase its first cost 25 per cent. The rent obeys the arrangement and advances to \$250 a year. The laborer who earned \$3.50 a day before the "victory," earns but \$2.80, or \$3 at the most, after the victory, and his rent has increased \$50 a year in consequence of the victory! Nor does this phase of the question end here. The future phase implies a general corresponding increase in every department of business. If the buildings in a city worth \$1,000,000,000 rent for an aggregate of \$15,000,000 a year, and their cost be advanced by increased wages to \$1,250,000,000, their aggregate rental must increase to \$18,750,000. That increase means increase all along the line, in the costs of clothing, books, food, everything. This future phase of the question thus assumes even more importance than the present phase, and it will be a more important phase for the laborer, the mechanic, the bricklayer, the hod-carrier, the carpenter and the unskilled laborer than it will be for the capitalist and the employer.

Cheap demagogues, men of narrow minds, men devoted to fads in the supposed interest of labor, men intolerant of anything and everything, anybody and everybody not favorable to their fads, men who advocate the boycott, riot, violence, intimidation, murder, assassination, as justifiable weapons for labor to use, may be unable or unwilling to read the stern lessons of facts, but facts inhere in labor troubles as in every thing else not lifted above the influence of natural laws. The Chicago "victory" may be "a magnificent vindication of labor's claims to recognition," but it looks more like a result entirely problematic, like an irremediable loss for the present and inevitable greater loss for the future. Labor can not force capital to do the impossible, and each "victory" of the Chicago stripe will forever mark a backward, rather than a forward, step, despite the empty claims of the vicious agitators and their purblind adherents.

## THE NEW DEPARTURE IN MILLING.

Following is a condensed statement concerning the new model flouring-mill soon to be put in operation in Jackson, Michigan, by the inventor, Mr. George T. Smith: "My new mill will be a forerunner of a great change in mill-building. The mill is going to be a great success for the following reasons: It has now become a settled fact that the less you handle the stock during the grinding and bolting process, the better the results; the flour is much better in quality, and a larger percentage of high grade flour is made. The short round reels have been used to advantage on account of their gentle treatment in bolting, but we have been unable, up to this time, to avoid handling the stock over a great number of times. It is a very complicated and endless threshing of the stock about through spouts, up elevators and down the back legs of elevators, until no one can tell how far it has traveled or how many times it has been carried up from basement to garret. For instance, the grain is slightly ground through the first roll on the lower floor; from that roll it passes down through a spout to an elevator, which takes it to the top of the mill; from the elevator it passes down again through the spout to the roll, then down

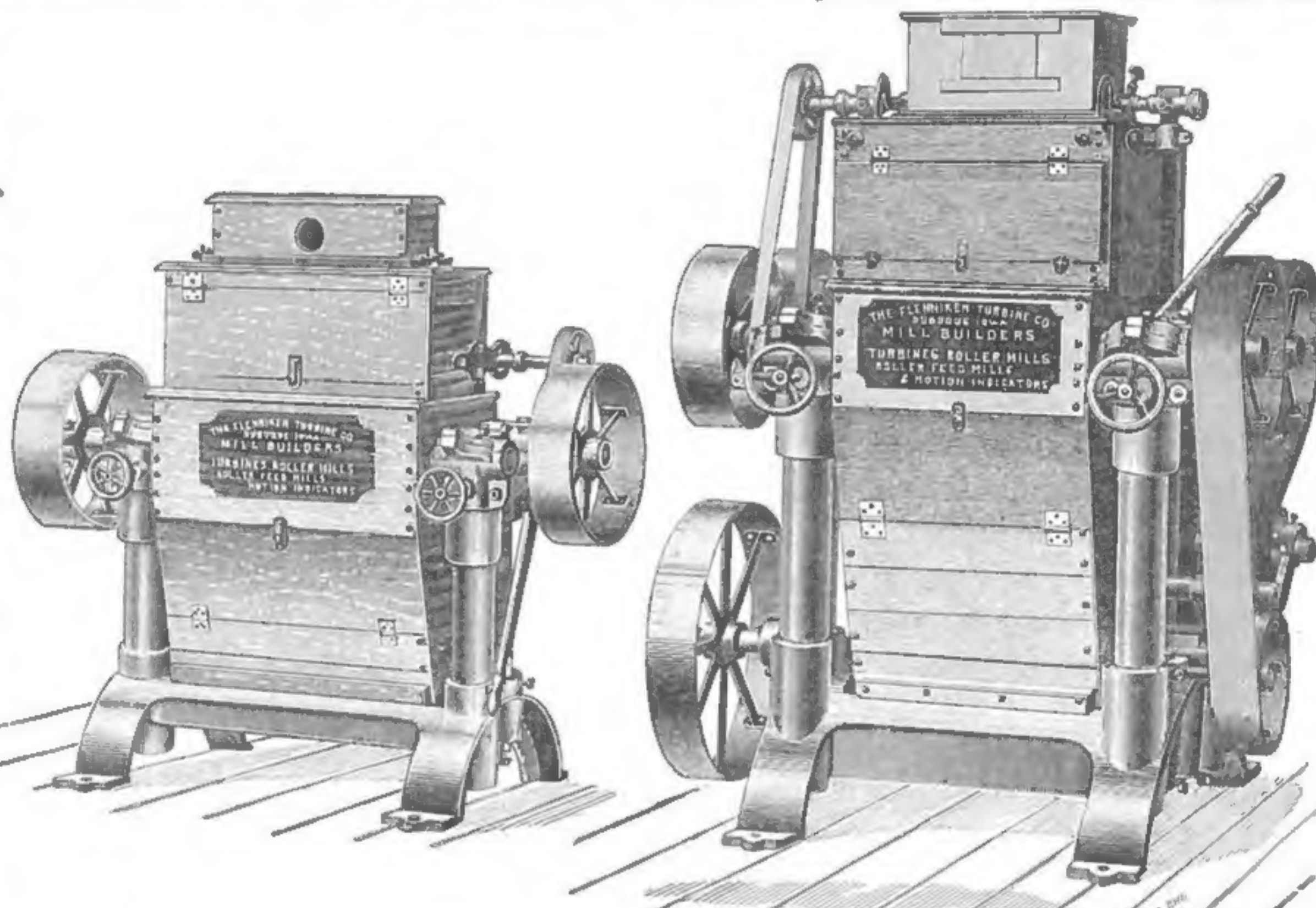


through crooked and angling spouts, generally through two or three floors, to another roll, to be again ground and again sent down through spouts, up elevators, traveling and threshing about until a part of the product has passed up 16 elevators and through 60 spouts. First-class millers know that this sort of treatment is a great injury to the flour, and that much of the best stock has been worn into fine worthless dust. With the general-reduction system it has been impossible to avoid this complicated way of grinding and bolting. In my plan we have almost entirely done away with the expensive, elaborate and unnecessary way of getting wheat into flour. My plan is so very simple that it is hardly necessary to explain it. The wheat passes through the first roll into the conveyor under the roll, which conveys it into the spout leading to the head of the reel below; it is then bolted in the ordinary way. The product to be ground again is taken by another conveyor back to the next roll below it. An opening, the whole length of this roll, is left on the top of the conveyor, so that no choke of meal is possible. The conveyor takes it to a spout, which lets it drop straight down into the head of the reel, so that all the trouble and danger of passing it down through the crooked and angling spouts has been done away with. In this plan the rolls are placed upon a very solid frame, instead of a skaky floor, and, by passenger elevator, the rolls and bolts can both be operated better, and therefore can be attended to with much less trouble. Nearly all of the spouts of this mill are in reach of the miller when he is passing up and down the elevator. Not over one-fourth as much room in the mill building is used as in the old way. This room is often valuable. The mill building is not filled up with a forest of unnecessary elevators and spouts. We have made an estimate of power required to drive from 25 to 30 elevators, the number generally required in a mill making the same reduction, and we could hardly believe our own figures; it is a large percentage of the power required for the whole mill. What we claim and guarantee is: First, Better flour with the same amount of wheat. Second, Twenty-five per cent. less power required to run the mill. Third, Less labor is required. Fourth, Less expense in keeping the machinery in repair. Fifth, Machinery runs better with less trouble. The rolls or any machine can be taken out and others put in their place with much less trouble than in any other way of constructing a mill; any flow-sheet can be used, and any kind of reels, round or hexagon. The writer has probably done more experimenting than almost any one else in the trade, and has been instrumental in bringing out improvements that have been generally adopted among millers. I have known that the gradual-reduction system has been handicapped by the increased amount of handling the stock that was necessary to make the number of reductions required. You will see that a great improvement has been made when we do away with this present system of running the product all over a ten-acre field during the manufacturing process. The elevators and spouts cut no figure in the manufacturing; they are of no use except in getting the ground product from the rolls to the bolt, and from the bolt to the rolls, and if that can be done in this plain, simple and cheap way, which I have shown in this plan, we will soon put an end to the swamp of spouts and elevators. I say we have done it in a more practicable way. In a few years the old way will be

looked upon as one of the queer things of the past. I am having encouraging letters from millers; they seem to favor it and believe in it. This is unusual, as they generally fight everything new; but this interests them, as it touches their pockets."

#### THE GRAHAM ROLLER MILL.

Herewith is an illustration of the celebrated Graham roller-mill, manufactured by the Flenniken Turbine Company, of Dubuque, Iowa. These mills are built single, or double, or three mills in one frame. In these mills the builders have aimed to plan frames artistic in design and economical in the distribution of the metal, and they have accomplished both aims, securing a mill that combines strength and lightness, simplicity in operation, extreme cleanliness and the minimum of friction. The uprights are wrought-iron pipe firmly set in the base and connected at the top with rods, which take all the strain of spring compression and the pressure in grinding. The use of wrought-iron secures lightness and strength, and yet the rigidity of bearings is so perfect that the manufacturers claim the feed can be shut off without the least danger of roll contact, no matter how fine they may be set to grind. By using long bearings, the best grade of babbitt, and unusually large driving-pulleys, which allow the belt to run slack, much friction on the journals is avoided. The feeding-device is reciprocating and automatic, and perfect in its delivery of material to the rolls. These machines have been in use in many mills two years, and have proved to be specially adapted to short-system milling, which usually tests the durability of journals and rigidity of adjustment much more severely than when the work is distributed among a greater number of machines. The three-pair mill is a recent invention. It is novel in design and possesses many good points. The rolls are arranged



THE GRAHAM ROLLER MILL.

in a series of steps, each pair being higher than the pair preceding it. The mill may be used either for making breaks or for combining breaks and smooth rolls, or it will also make an excellent corn or feed mill. It is designed to do the entire work of the short one-reduction system of the Flenniken Turbine Company. Address the manufacturers for full information.

#### THE CULTURE OF RYE GRAIN.

Rye, like wheat, has been known and cultivated for a bread plant from the remotest ages. History gives no account of its discovery, nor has it ever been found growing wild in any part of the world. That it will grow wild for several years has been demonstrated. Rye was cultivated in ancient Egypt and has been cultivated to a greater or lesser extent ever since. It was taken into Europe along with the knowledge of better agriculture and the arts and sciences from Egypt. It has a place in agriculture of great value, which wheat and other cereals are unable to fill. It is much harder than wheat, will endure severer freezing, is therefore less liable to winter-kill, and will ripen farther north than wheat, barley, millet or oats. It is raised in Norway up to latitude 67 degrees, and in Siberia up to 62 degrees. In America it is raised far north of the limits of the United States. It belongs as a whole to regions of cooler temperature and more rain than those which produce the most of our other cereals. Rye, like wheat, exists in two varieties,



the winter and the spring, and some farmers think there are two kinds of winter rye, the white and black. Rye is the principal bread of the inhabitants of Northern Europe. For a long time after the first settlement of this country it furnished one of the ingredients for the bread of a great many families, corn furnished the other. "Rye and Indian" was the common term for the bread in most households.

Wheat never flourished well in portions of New England nor in the elevated portions of the Middle States, while rye over this whole region flourished reasonably well. Rye was largely grown in the rougher parts of Pennsylvania, and west of the Alleghenies it was chiefly distilled into whiskey. Rye straw is in great demand for packing purposes and paper-making in the eastern part of the United States, and it brings so good a price when bright and long that the crop of straw from a field will sometimes bring the farmer more money than the grain itself. At the present time, with present prices, when both the straw and grain of rye are sold, an average crop of rye will bring more than an average crop of wheat. Eight bushels per acre is the average yield of rye in the United States; 15 to 20 bushels are considered a fair crop, but 30 bushels are frequently raised. The number of acres devoted to rye in the United States, according to the census of 1880, was 1,767,619, and the number of bushels raised not quite 25,000,000. Pennsylvania was the leading State in amount of production, closely followed by Illinois. The production has not relatively kept pace with the increase of population, nor with the increase in production of other cereals; in fact the production of the year 1879 was only about 1,000,000 bushels more than in 1839, forty years previous. In 1887, 2,053,447 acres were given up to cultivation of rye, but only 20,691,000 bushels were produced.

#### MILLING PATENTS.

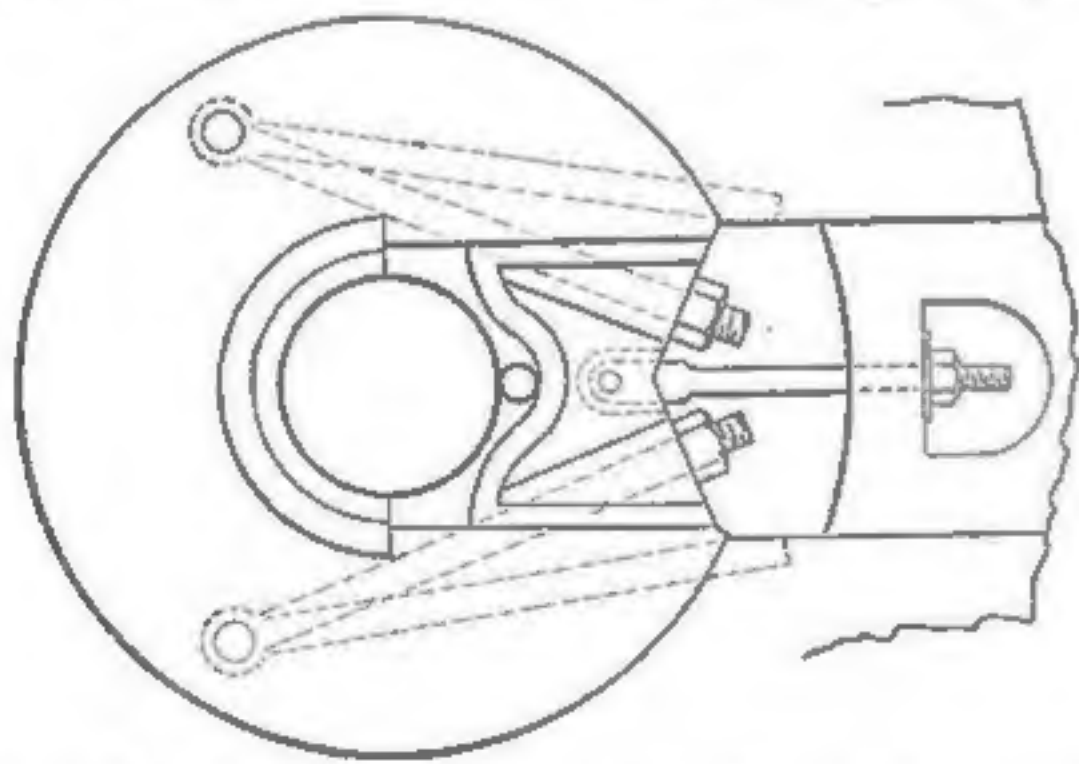
Among the patents granted May 20, are the following:

John T. Briggs, Decatur, Ill., No. 428,067, a ventilating-hood for dust-collectors, comprising, in combination with a vortex-forming dust-collector, a structure in the form of a conical frustum, having the base fitted over the air-outlet of the collector, such structure being composed of a series of hollow cone-sections, each overlapping the next lower in a manner to form intervening spaces, and each having its base presented toward the air-outlet.

George E. Sterling and Sidney T. Sterling, Camden, Ind., No. 428,424, a dust-collector for thrashing-machines and separators, comprising the combination, with a thrashing-machine, of an exhaust of suction fan mounted upon said machine, having its discharging orifice or tube communicating with the interior of said machine above the straw-conveying floor thereof, and a spout leading from said fan to a point in proximity to the beater or thrasher-cylinder, whereby the dust produced by said beater is conveyed to and discharged among the straw inside the machine when the machine is in operation.

#### PULLEY.

426,662. George C. Cowles, East Saginaw, Mich., assignor of one-half to Edward Germain, same place. Filed June 28, 1889. Serial No. 315,858. Dated April 29, 1890.



CLAIM 1. In a pulley having an opening from the center to the periphery, the combination, with a locking-head adapted to fit into said opening adjacent to the shaft, a separate web and rim section adapted to fill the opening in the web and rim, and means for holding the latter in place, of bolts connected with the web of the pulley for holding said locking-head in place.

2. The combination, with a section of rim adapted to fit into said opening, of a locking-head located in the opening adjacent to the center and forming a part of the shaft-bearing, bolts attached to the web of the pulley and adapted to enter open bolt-orifices in the locking-head for holding the latter in place, and bolt for connecting the locking-head and removable rim together.

#### GERMAN AND AUSTRIAN LABOR.

According to recent European reports, the discontent which has for some time been muttering in the flour-mills of Germany has at length burst into a storm, and from such important centers as Berlin, Luebeck, Eberswalde, Eisenach, Kassel, Flensburg and Dantzic comes news of urgent demands on the part of the operatives for shorter hours and better pay. At Merseburg, Magdeburg and Luebeck strikes have already taken place, and it is feared that the example of these strikers will be followed in many other districts. This movement is apparently perfectly spontaneous, but it seems pretty clear that its strings are controlled by the German Operative Millers' Union, a body formed some eight or nine months ago, and said to number some thousands of members within its many branches. The demands of the German operatives are, on the face of them, eminently reasonable and may be summed up in "a 12 hours' shift, no Sunday labor, and 18 marks (about \$4.37) a week." The shifts in German mills are on the average very long, varying from 15 to 32, but an 18 hours' shift seems to be in many parts of the country the standard. At present it is difficult to say what reception the demands of the operatives is likely to receive at the hands of the employers, but on the whole there appears to be more willingness to give way in the matter of hours than of wages.

The great stumbling-block to a complete accord between masters and men is evidently the claim for uniform treatment advanced by the union, which is anxious to have the hours and wages of milling operatives regulated on a uniform basis. This, the masters urge, is out of the question, on account of the great diversity in the conditions of the trade. The 12 hours' shift and the full rest on Sunday are all very well, argue the smaller masters, for large mills, but are out of the question in the case of wind and water millers, totally dependent for their existence on an uncertain source of power. It is further maintained, by those who speak on behalf of this class of employers, that operatives in small country mills have no right to grumble at occasional long spells of work, necessitated by the conditions of their employers' trade, because in such establishments the rate of pay is higher as a rule than in the larger merchant mills or "flour factories," as they are termed in Germany. In such establishments the working miller may be called on to labor for only 12 hours at a time, and he will perhaps enjoy a free Sunday, but on the other hand his wages will not average much more than 60 cents per day, out of which remuneration he has to find board, lodging and clothes for himself and family. The country operative, on the other hand, is declared to be usually in receipt of better pay and to enjoy other advantages in the shape of free or partially free rations.

Some employers have evidently seen the impolicy of keeping their men to excessive shifts, and one master-miller writes to a milling-journal to urge that, in their own interests, employers should shorten the hours to 12 at most. When a man has worked more than 12 hours his labor, according to this witness, becomes little better than worthless, and in support of his proposition he cites his personal experience of the 12 hours' shift, which he introduced into his own mill some years ago. From his books he shows that with the same staff and same plant of machinery his output of flour was increased by 50 per cent. within two years of his institution of the shortened shifts. In Austria, too, the hours of labor are many, and the typical shift seems to be 25 hours, on the completion of which the operative is allowed 12 hours' rest. But the demand for a uniform 12 hours' shift has spread to that land, and quite recently 150 operative millers from different parts of Lower Austria attempted to hold a meeting at Unter Waltersdorf, in the Vienna district, but this the mayor of the locality refused to allow, and the assemblage was dispersed by the police.

A German cotemporary states that, taking a large bundle of letters from operatives, the chief grievance is beyond doubt the length of the shifts, which seemed to vary with different districts from 15 to 32 hours, while a Hessian miller spoke of a shift of 36 hours; but that, no doubt, was a solitary case. Intimately connected with the question of hours is the custom of Sunday work, because it would appear that on that day a holiday given to part of the staff means a 24 hours' shift for the operatives unfortunate enough to be left in the mill. It is noteworthy that many of the smaller millers are quite willing to see Sunday labor absolutely prohibited to the larger mills, but they claim that a dispensing power should be vested in some authority in favor of such



small mills as are dependent upon a variable supply of power or are exposed to "pitiless competition."

How serious is the German labor crisis, which it is the object of the Rescript and other measures of the Emperor William II. to bring to a satisfactory conclusion, may easily be gathered from a perusal of those sections of the German papers that deal with labor questions. The air seems thick with strikes, and although it is palpable that in the latter there is much exaggeration, a liberal discount will still leave a large residuum of dangerous bitterness between employers and employed. Of course at such a time all the croakers in the land are apt to break loose and make the heavy atmosphere still more oppressive with their dismal cries. Thus a body known as the "Deutscher Mueller-bund," of Berlin, has published a warning to millers, who are notified that their men intend striking in a body, at the first convenient opportunity, unless granted 8 hours a day and a minimum wage of 30 marks a week. Those who advance this extraordinary statement predict that the strike will witness the formation of bands of sullen and angry operatives, who will wander through the country safe from the interference of police or military busy guarding the larger factories and the great centers of industry, and will proceed to wreck the property and jeopardize the lives and limbs of such millers as happen to be burdened with country mills. An awful picture, truly, but as a German milling cotemporary remarks, "Food is seldom eaten as hot as it is dished."

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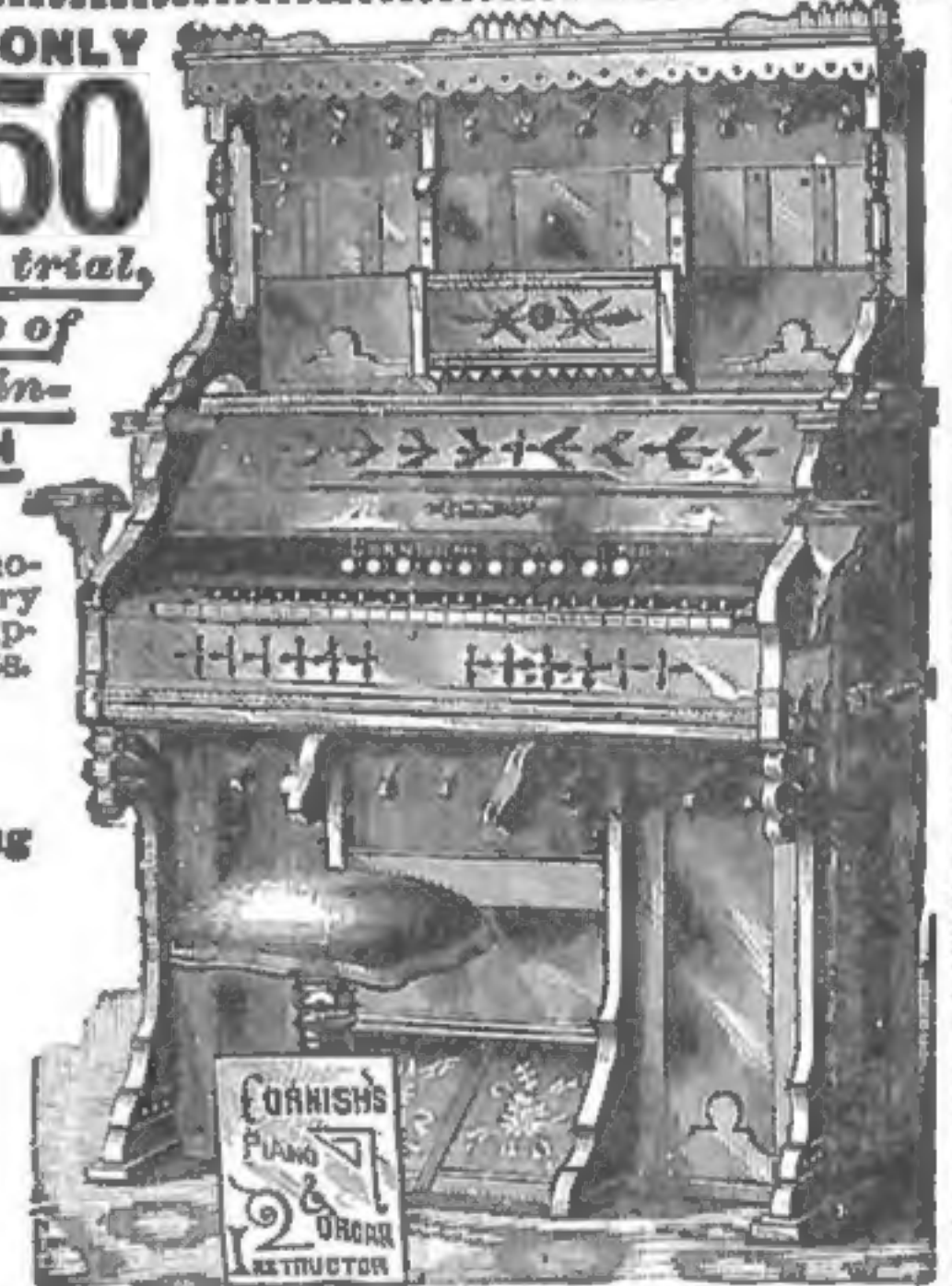
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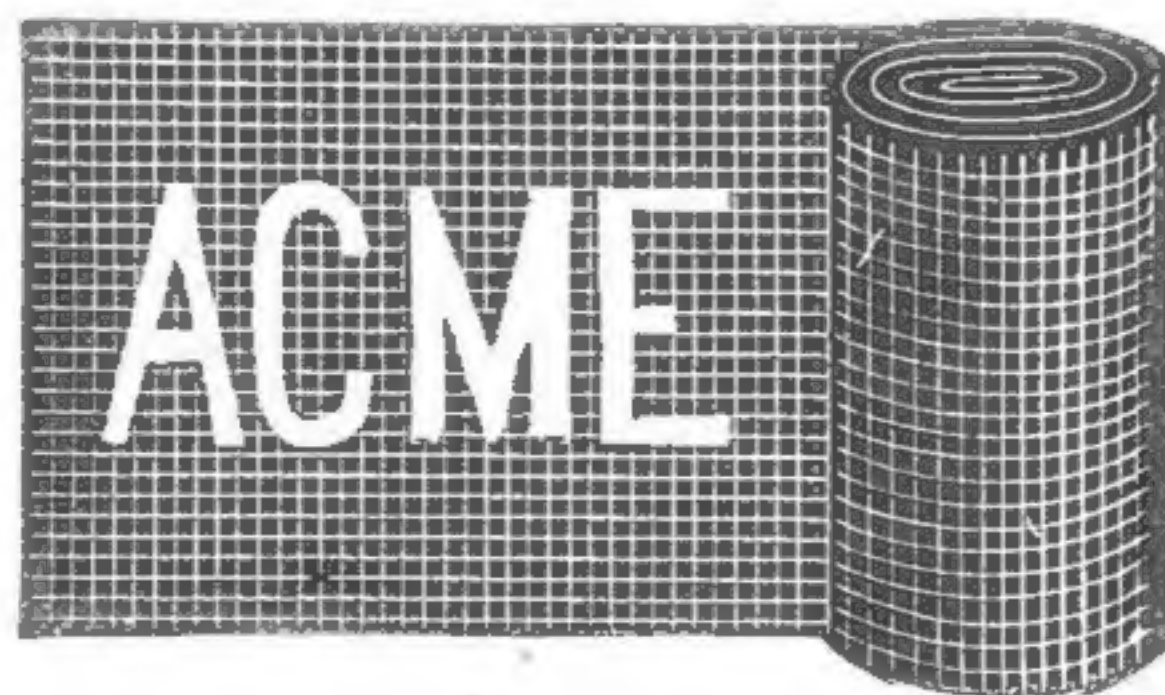
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# Practical Notes

**INK FOR WRITING ON GLASS.**—An ink that will write on glass can be made from ammonium fluoride dissolved in water and mixed with 3 times its weight of barium sulphate.

## GENERAL NOTES.

WORK is being pushed actively on the building for the I. V. Williamson school for the mechanical trades, which will be located near Philadelphia, Pa.

**BIBLICAL** units have the following equivalents: A shekel of gold was \$8. A firkin was seven pints. A talent of gold was \$13,809. A talent of silver was \$538.30. Ezekiel's reed was nearly 11 feet. A cubit was nearly 22 inches. A bin was 1 gallon and 2 pints. A mite was less than a quarter of a glass. A shekel of silver was about 50 cents. A piece of silver, or a penny, was 13 cents. A Sabbath day's journey was about an English mile. An ephah, or bath, contains 7 gallons and 5 pints. A day's journey was about 23 1-5 miles. A hand's breadth is equal to 3 1/4 inches. A finger's breadth is equal to 1 inch. A farthing was 7 cents.

### POINTS IN MILLING.

OWNERS of mills are always on the watch for what they call "good roofing material" for their mills. One who questions them will find that the chief idea most of them possess, concerning the goodness or badness of a roofing material, is that it must be a material that will resist fire. I have been surprised to find this idea prevailing in the minds of men whose mills were so remote from other buildings that no danger from outside fire was to be feared. Now, why should the owner of a light wooden mill care to cover it with a fire-proof roof? That's a question I have often asked myself, but no answer has ever suggested itself to me.

**FIRE-PROOF** roofs and fire-proof buildings are not a possibility. Millers who pile up four walls of stone and cap them with a slate or tin roof talk of "absolutely fire-proof" mills. What do they mean? A building near such a mill burns. A wind bends the column of smoke and sparks upon the "fire-proof mill." The fire-proof slate on the roof cracks in the heat and slides off, leaving the wooden rafters and boards bare. They take fire and the flames spread downward through the fire-proof mill, burning everything inside the four stone walls. How does the slate-roofed stone-walled fire-proof mill come out of the fire? In the worst conceivable shape naturally. The slate has been calcined to powder and left no more ashes than the burned bags, or flour, or grain, or wood-work left. The fire-proof walls are cracked and calcined so badly that they must be pulled down. The stone has been ruined forever. It is brittle. It must be removed entirely.

ANY one who has observed the ruin of a stone building by fire knows that the ruin is in nearly every case complete. He knows that there is not a poorer material used in building than stone, so far as resisting fire is concerned. He knows that the tendency of the thin roof-slates to crack under low heat extends to the thick wall-stones under higher heat.

WHAT is the moral? The miller who wishes to build a structure that will come nearest to being fire-proof should use brick, not stone, for the walls. He should use no stone in window sills or anywhere else in reach of flames from neighboring buildings. For roofing he should use anything

but slate. Tin roofs, corrugated iron roofs, plank roofs, even shingle roofs, are better than slate.

PROBABLY the nearest approach to slow-burning construction for a mill may be made with thick plank walls, with no interstices or air-spaces to carry flame through. Such walls, covered with metal in sheets, either plain or corrugated, offer great resistance to flames from outside. Brick walls, of course, are good walls for fire exposures. Almost any material is better than stone. Watch a fire in a group of elevators. Note how stubbornly the solid wooden walls resist outside flames blown against them. When wet, they are almost incapable of burning.

MILLS generally go up in a puff, and the most that builders can do is to construct the walls so as to offer the greatest possible resistance to outside fire exposures. Flimsy buildings invite their own swift destruction and endanger neighboring buildings at the same time. Insurance rates tell the story of the reputation such buildings bear.

WHATEVER may be accomplished in the prevention of fires from outside sources, nothing on earth will render a mill "fire-proof" so far as internal fire dangers are concerned. Walls, roofs, floors and all interior work made of asbestos will not avail against the careless employe, who subjects the mill to one perpetual inside risk. The employe who has a contemptuous familiarity with fire, and a sublime ignorance of the dangers of flour-dust floating in air, will eventually burn down the mill in which he exploits his talents. An operative of this class would burn down a mill built of solid ice. Nothing can long withstand his incendiary tendencies. For the deeds of such a man the owner of the burned mill must settle with the insurance men or with the bankruptcy courts. Slate, stone, brick, iron and wooden walls and roofs are all alike to him.

FLIMSY mills are becoming very numerous nowadays. Few stone mills are built. Not many brick mills are built. The greater number by far are wooden buildings, built so as to encourage fires to start, and to make it impossible to put them out after they have started. The result is evident in the daily grist of fires in flouring-mills. During the past year an almost incredible number of mills burned in the United States. The total loss was millions of dollars, and the burden becomes more and more intolerable as the margin of profit in milling grows narrower, and as the insurance men put up rates, refuse more and more risks and throw all the cost of mill fires directly upon mill-owners.

HAS there ever been made an effort to introduce the "slow-burning" style of structure in flour-mills? Would it not pay the milling fraternity to do something towards rendering their fire burden less heavy and less costly? Suppose every millers' convention, local, State or national, were to make a feature of the fire question, not from an insurance, but from a prevention, standpoint, would not some means be found to enable millers to build better than they now do? The question is literally a "burning" one, and the longer it is ignored by the millers, the more it will burn their pockets.

### A NEW METHOD OF TREATING DISEASE.

#### HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.



**PREJUDICE** Investigate the merits of the Reliance Safety Water Columns. It pays to keep posted. Many of the largest corporations have found it profitable to discard the old appliances and adopt these safeguards. There is always economy in safety. Send for illustrated price-list.

Reliance Gauge Co., 831 Sheriff St., Cleveland, Ohio.

## THE "HARLOW" Positive Feed Lubricators.

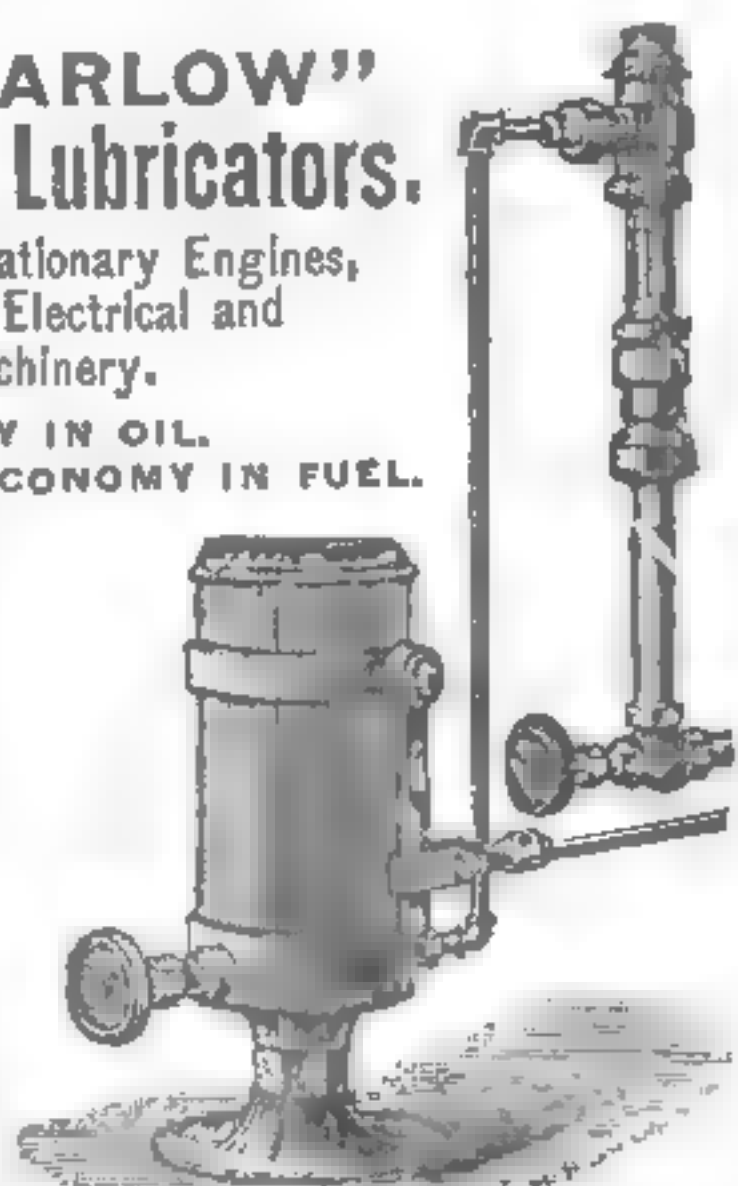
For Marine and Stationary Engines, Steam Pumps, Electrical and other Machinery.

MAXIMUM ECONOMY IN OIL.  
MARKED ECONOMY IN FUEL.

Not dependent upon or operated by Steam Pressure, Condensation or Gravity.  
Not affected by changes of temperature.

BEING operated by some moving portion of the engine or machine to be lubricated, the "Harlow Lubricator" starts and stops with the engine or machine being lubricated, without requiring the slightest attention from the engineer or operator, always delivering the oil in any amount from a drop to a constant stream.  
The cup can be filled at any moment while the engine or machine being lubricated is in operation, without causing any leakage either of oil or steam.

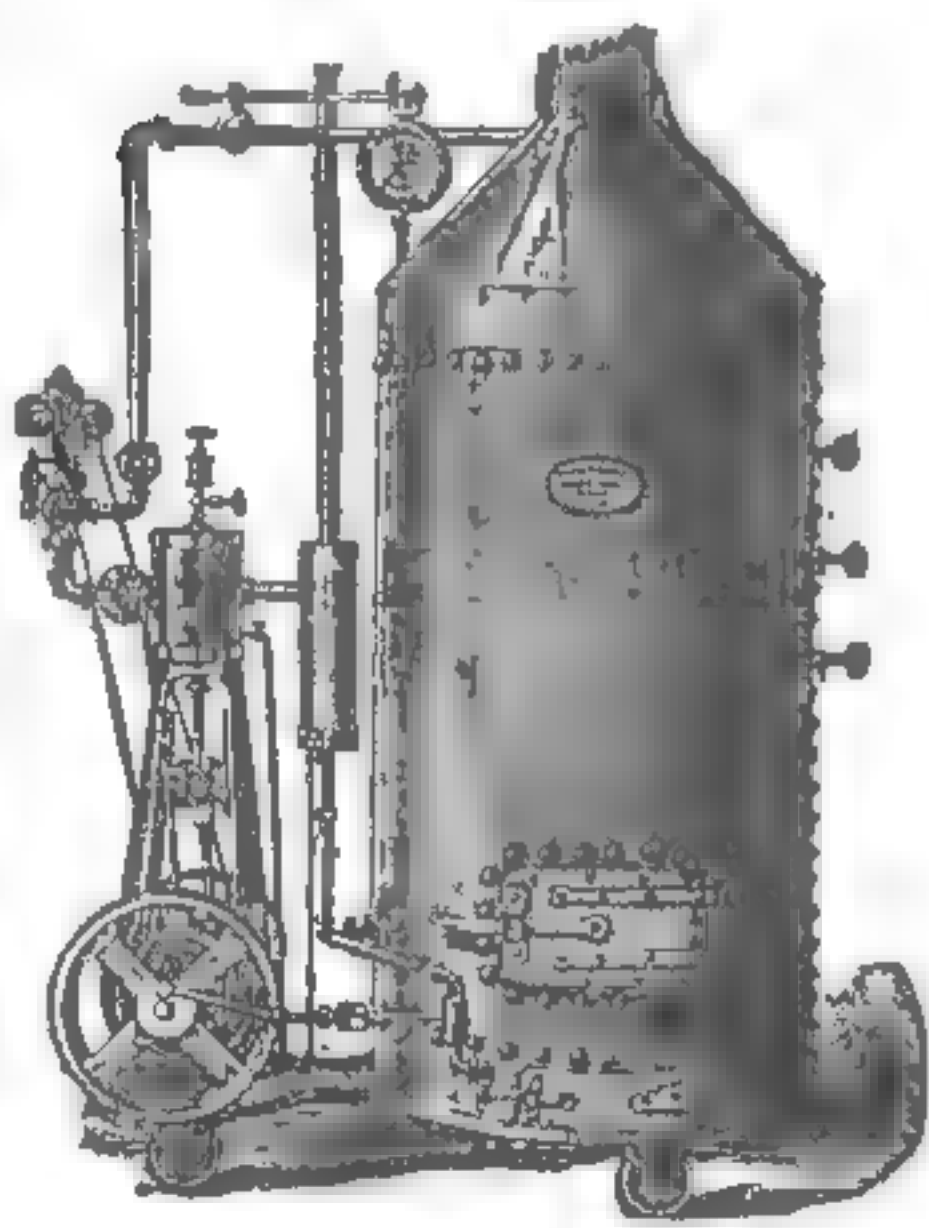
Harlow Lubricator Mfg. Co. BOSTON, Mass.  
U. S. A.



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A Large Assortment of Machinery.

The Best 6-Horse Power Semi-Portable Upright Engine and Boiler Made.



SPECIAL PRICE. GUARANTEED.

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Tonawanda N. Y.

## THE BEST AND CHEAPEST CORN AND COB CRUSHER

IN THE WORLD.

All wearing parts cast of a steel mixture. Notice difference in construction. Most area where most work is done, where all other crushers have least area where most work is done. Low priced machinery is not the cheapest, considering durability and efficiency. Sent on 30 days' trial when satisfactory reference is furnished.

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LEFT-HAND MILL.

DRIVEN FROM ABOVE.



R. C. McCULLEY, LANCASTER, PENN.

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Corrugated Iron is represented to be "just as good as" our Patent Edge Corrugation. While this is complimentary to our material, unfortunately it does not work out well in practice.

The only Corrugated Iron that can be recommended for roofing is manufactured by

The Cincinnati Corrugating Co.  
PIQUA, OHIO.



## "ELECTRIC" BELT DRESSING.

A WONDERFUL LEATHER PRESERVATIVE, suitable for Leather, Rubber, Cotton or Rawhide Belting. Belts dressed with this dressing will last twice as long and transmit 100 per cent. more power. Save your Belting and prevent heating of journals by running them under a reduced tension. Sold on approval to responsible parties. SEND FOR CIRCULARS.

BUFFALO SPECIALTY MFG. CO.,  
67 & 69 Washington Street, BUFFALO, N. Y.

## WEBSTER'S UNABRIDGED ANCIENT EDITION.

A so-called "Webster's Unabridged Dictionary" is being offered to the public at a very low price. The body of the book, from A to Z, is a cheap reprint, page for page, of the edition of 1847, which was in its day, a valuable book, but in the progress of language for over FORTY YEARS, has been completely superseded. It is now reproduced, broken type, errors and all, by photo-lithograph process, is printed on cheap paper and flimsily bound. A brief comparison, page by page, between the reprint and the latest and enlarged edition, will show the great superiority of the latter. These reprints are as out of date as a last year's almanac. No honorable dealer will allow the buyer of such to suppose that he is getting the Webster which to-day is accepted as the Standard and THE BEST,—every copy of which bears our imprint as given below.

If persons who have been induced to purchase the "Ancient Edition" by any misrepresentations will advise us of the facts, we will undertake to see that the seller is punished as he deserves.

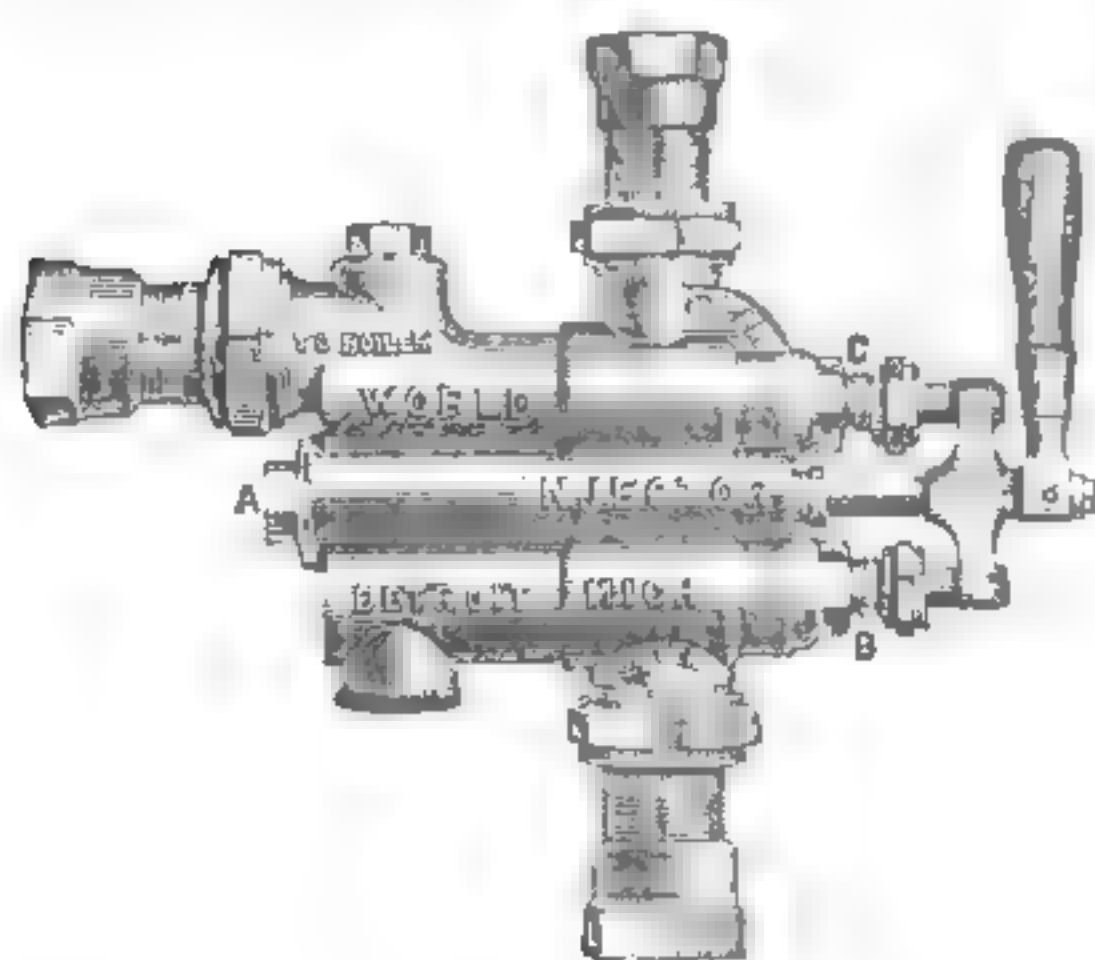
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SPRINGFIELD, MASS.

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AMERICAN INJECTOR COMPANY,

175 Larned Street West, DETROIT, MICH.







J. Grainling, Berlin, Pa., remodels to rolls.  
 S. Harding, Easton, Pa., remodels his mill.  
 I. Conroe, Conroe, Tex., builds a grist-mill.  
 J. Rupright, miller, Crystal, Mich., sold out.  
 E. O. Faucett, Thurlow, Pa., improves his mill.  
 E. L. Fillius & Co., Hudson, O., remodel to rolls.  
 Wenner & Peters, Olive, Md., remodel their mill.  
 J. E. Hooper, Colorado, Tex., started a grist-mill.  
 Gochmauer Bros., Dalton, O., build a 50-barrel mill.  
 J. Y. Keeny, Eklo, Md., builds a 40-barrel roller mill.  
 J. St. over, Manassas, Va., builds a 75-barrel roller mill.  
 Royston & Hanner's grist-mill, Rutledge, Ala., burned.  
 D. L. & P. A. Hain, Wernersville, Pa., remodel to rolls.  
 L. Gast & Co., Gahanna, O., build a 50-barrel roller mill.  
 T. M. Waddy, Waddy, Ky., has points on a flour-mill.  
 Gochnaver & Son, Hall, Pa., build a 30-barrel roller mill.  
 A. Drechsel, Carrollton, Md., builds a 40-barrel roller mill.  
 Harry Trimble has rented the Matthews mill, near Zion, Md.  
 Filbert & Bro., Pine Grove, Pa., build a 50-barrel roller mill.  
 S. E. Williams & Son, Wheeling, W. Va., build a flour-mill.  
 R. S. Meiser, Mt. Pleasant, Pa., builds a 35-barrel roller mill.  
 Edward F. Webster, flour-mill, Minneapolis, Minn., assigned.  
 J. A. Nicodemus, Boonsboro, Md., builds a 30-barrel roller mill.  
 R. M. Pindell & Co., Pindell, Md., want machinery for a grist-mill.  
 The Wapakoneta Milling Co., flour-mill, Wapakoneta, O., dissolved.  
 Jos. R. Phillips, of Price & Phillips, millers, Wilmington, Del., is dead.  
 Fritch Bros. & Bogh, Macungie, Pa., are improving their flouring-mill.  
 Coles' flouring-mill, Rochester, Minn., burned; loss \$50,000; insurance \$15,000.

The Sweet Water, Tenn., Mill Co. increase the capacity of their flouring mill.

A. T. Lineburner, Kingston, N. Y., is building a large steam-power feed-mill.

Parson & Co., Batavia, N. Y., increase their mill capacity to 150 barrels a day.

Wm. Pfeiffer, Green Springs, Pa., remodels his mill to rolls with 50-barrel capacity.

N. I. Gorsuch & Son, Westminster, Md., build a 100-barrel steam roller flouring-mill.

Falmouth, Ky., men incorporated the Falmouth Milling Co., to build a flouring-mill.

P. A. Doub, West Beaver Creek, Md., will build a 40-barrel roller flouring-mill at once.

The East Tennessee Land Co., Harriman, Tenn., have points on a projected flouring-mill.

Godley & Co., Scottsville, N. Y., enlarge the capacity of their flour-mill to 300 barrels a day.

E. Gerry's flour-mill, Harlem, Pa., burned; loss \$10,000; insurance \$6,000; fire incendiary.

The Greenport, N. Y., Flouring Mills are to be sold in consequence of a disagreement among the proprietors.

J. C. Grove, Luray, Va., has bought the Meadow Mills and will improve the plant; he wants roller-mills and purifiers.

G. B. McDonald's flour-mill, Jefferson, Tex., which was recently burned, will be rebuilt at once; machinery is wanted.

J. S. Moreman and others, Brandenburg, Ky., incorporated the Corydon Mill Co., capital stock \$12,000, to build a flour-mill.

The Batesville Flouring Mill & Mfg. Co., capital stock \$25,000, has been organized by M. McClure and others, Batesville, Ark. They want an outfit for a 75-barrel roller flouring-mill.

S. L. Hendrickson's flour-mill, Orangeville, Pa., burned; loss total; insurance \$11,500; fire started from a heated journal.

The Cumberland Valley Railroad Co., Chambersburg, Pa., will build a grain-elevator in Hagerstown, Md., where they bought a \$10,500 site from the Hagerstown Steam Engine & Machine Co.

Campbell, Stevens & Co., millers, Chatham and St. Thomas, Ontario, Canada, dissolved, Archibald Campbell and N. H. Stevens continuing the Chatham business, and John Campbell the St. Thomas business.

The Larrowe Roller Mill, Cohocton, N. Y., devoted exclusively to buckwheat milling, with a capacity of 400 barrels daily, will be operated by a stock company, who will add the manufacture of granulated corn-meal.

The National Pulley Covering Co., of Baltimore, Md., whose patent Friction Covering for pulleys is so well known, have recently received the following communication regarding their covering from the Kensington Engine Works, Limited, Philadelphia, Pa.: "Gentlemen: The Pulley Coverings which you have furnished and applied for us have been running very successfully and we are entirely satisfied with them. They have now been in use for some time, and seem to be very durable."

The insurance on the burned flouring-mill and grain-elevator of the Winona Mill Co., Winona, Minn., amounts to \$202,000. Among the companies bitten by this "sprinkled risk" are: The M. & M. Mutual, Minneapolis, Minn., \$5,000; Michigan Millers' Mutual \$5,000; Millers' Mutual, Milwaukee, \$5,000; Mill Owners' Mutual, Des Moines, Ia., \$5,000; Millers' Mutual, Alton, Ill., \$2,500; Millers' National, Chicago, \$7,500; M. & M. Mutual, Rock Island, Ill., \$5,000; Indianapolis Millers' Mutual \$4,500; the balance was in the general companies.

#### BOOKS AND PAMPHLETS.

Barlow Bros., of Grand Rapids, Mich., have issued a new catalogue and price-list, showing a decided innovation in the manufacture and sale of their patent Manifold Shipping-Blanks, whereby they are enabled to arrive at that much-sought-for result of making a decided reduction in prices without sacrificing in the least the uniform excellent quality of the blanks. A copy of the catalogue and price-list will be cheerfully forwarded to interested readers. It will pay you to look into this matter, as it is something that you need if you are not using it.

There is an unusual variety of matter for the housewife in *Good House-keeping* for May 24, of which one of the more notable papers is that of Maria Parloa on "Early Preserving." The use of veal as an article of food is fully treated by Leslie Stone, with a large number of recipes for both French and American dishes. "Kitchen Secrets" will commend themselves to every student of perfect housekeeping, while "Planning and Perfecting a Home," by Annie Curd, teaches how economy and beauty may go hand in hand. "Buried Bread" relates in a humorous manner the tragic experience of an ambitious young housewife. The number is rich in all its departments, and the several pieces of verse, which principally relate to Memorial Day, are excellent. Published by Clark W. Bryan & Co., Springfield, Mass.

#### CATARRH.

##### CATARRHAL DEAFNESS—HAY FEVER.

##### A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.



THE BEST ARE THE CHEAPEST.

New York

MILLERS' FLOUR SACKS A SPECIALTY.

THE PATRONAGE of the MILLING TRADE is MOST RESPECTFULLY SOLICITED.

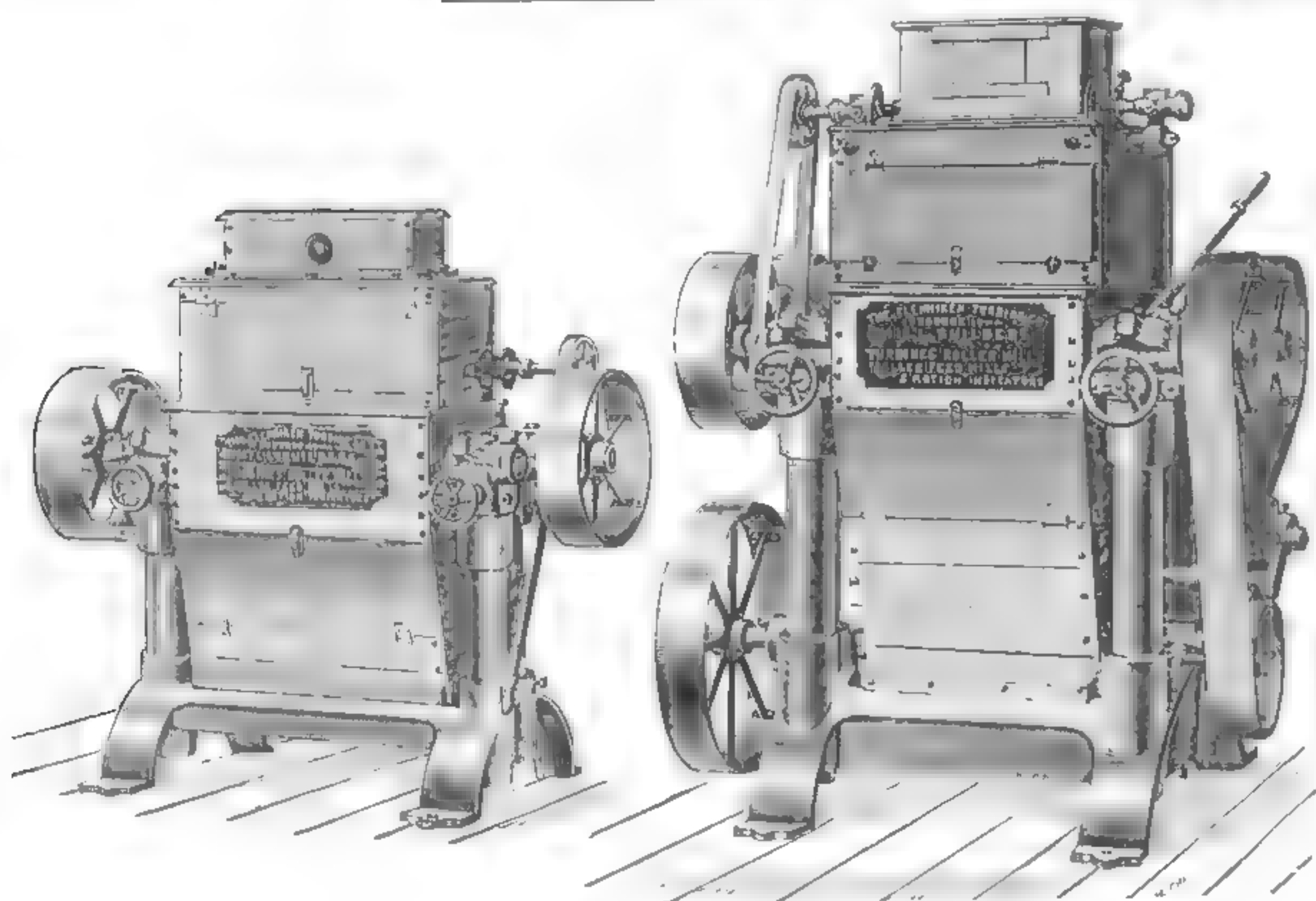


# ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,  
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease  
Trying to Make Bricks without Straw. The Red  
Sea of Expense Has Been Divided.

**The Wilderness of Reductions has Been Shortened. There  
is Manna in Abundance for Those Who Believe.  
Listen to the Glad Tidings of Great Joy!**



**ONE REDUCTION ON ROLLS IS  
A SUCCESS!** Two years of ex-  
perience in a dozen States, with all kinds  
of Wheat and diversified climates, has  
justified us in recommending its adop-  
tion in place of burrs in each and every  
case, whether for grinding Wheat, Rye  
or Buckwheat. We have perfected Roller  
Mills, Bolts and Scalpers peculiarly  
adapted to the wants of Small Mills, and  
all our machines *infringe no patents*, and  
no claims are made that they do.

Having consummated a bargain with  
**MR. O. C. RITTER**, the author and pa-  
tentee of **One Reduction**, which gives  
us the *exclusive right* to construct mills  
under his patents, our patrons in the  
future will receive a license from Mr.  
Ritter.

## SPECIALTIES!

Graham Roller Mills, Round Reels and Scalpers,  
Sectional Round Reels, Grain Separators, Motion  
Indicators. Before buying any of these machines  
send for our prices and descriptive circulars.

## SPECIALTIES!

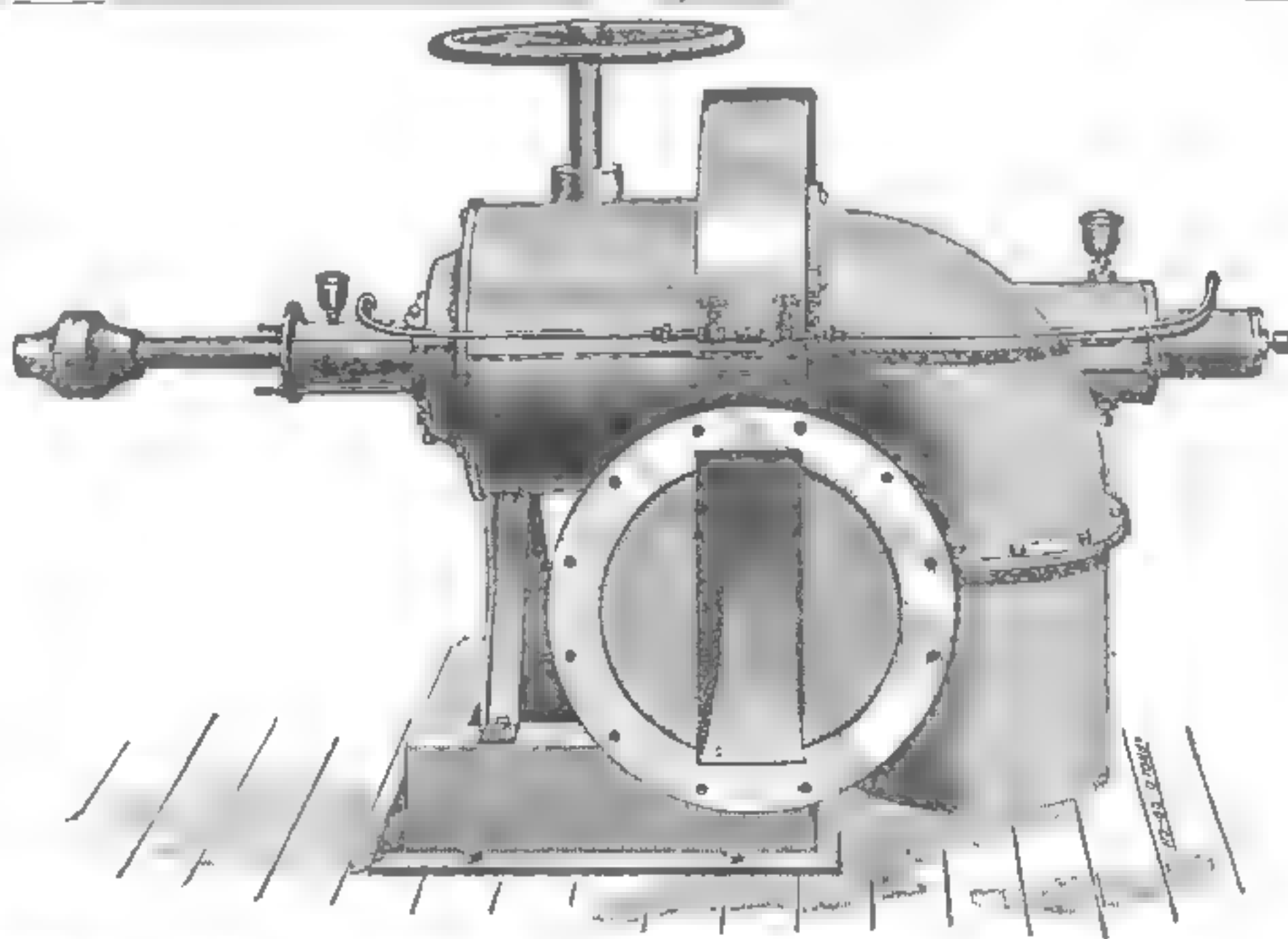
**Second-Hand Machinery, and Bargains in Every Line.**

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## The Best Turbines!

VERTICAL OR HORIZONTAL,  
With or Without Iron Flumes,

—BUILT BY THE—



# Flenniken Turbine Co.

DUBUQUE, - IOWA.



## EUROPEAN ECHOES.

ACCORDING to a recent decision the French law only guarantees trade-marks of foreigners, when such trade-marks are already registered in their own country.

SAYS the London "Miller" of May 5: News from India has been received by Henry Simon, of Manchester, stating that the Bombay Flour Mill Company, Limited, whose mill was erected according to his plans, is continuing to earn large dividends. It is said that after very large additions to the reserve fund and ample deductions on account of depreciation, a dividend of 10 per cent. was paid, and a bonus of 25 rupees, bringing the dividend up to 15 per cent. It is intended to duplicate the mill by the erection of a second mill of the same capacity on the same premises.

THE Council-General of the Department of the Pas-de-Calais, in France, has taken up the question of the restrictions on drawbacks, which has been exercising the French milling trade for some little time. Until 1873 millers in France were at liberty to export the flour made from foreign wheat by any customs zone; but since that date the drawback has not been receivable unless the export took place within the district in which the raw material was entered. As French millers are very anxious to try and win back some of the foreign trade which they enjoyed until a decade ago, it is probable that the step taken by the Pas-de-Calais Council is but the advanced guard of a formidable agitation.

VIENNA bread in London is made by the following recipe: Proportions—8 pounds of flour, 3 quarts of milk and water in equal proportions,  $3\frac{1}{2}$  ounces of compressed yeast, and 1 ounce of salt. The warm water is first mixed with the milk, so as to give a temperature of from 80 to 85 degrees Fahr. Sufficient flour is then added to make a weak sponge, not much thicker than a batter. The yeast is crumbled, mixed well in, and the sponge allowed to stand for about 45 minutes. The rest of the flour is next added slowly, together with the salt; the dough is then thoroughly kneaded, and set to ferment for  $2\frac{1}{2}$  hours. All Hungarian flour may be used throughout, or the finest spring American patent may be substituted in the sponge. The bread is glazed during baking by the introduction of a jet of steam into the oven.

QUEEN VICTORIA'S partiality for Viennese and French bread runs into all sorts of shapes. There are long French loaves and twists and rolls, and the Viennese bread is shaped into all sorts of curves and twists. There is one roll made like a little manikin. This is supplied for the edification and amusement of the Queen's small grandchildren when they sit at Her Majesty's table. The Queen is always supplied with this bread when at Buckingham palace. Her baker is S. Petrozywalski, a Polish refugee, in whom the Prince Consort took a great interest. This fancy bread is only supplied for the Queen's table; for the rest of the household the palace baker bakes. Some of the larger loaves supplied to the Queen cost ten-pence each. She did have this bread from London sent down to Windsor, but owing to the late arrival of the train that conveyed it, or something of that sort, this was given up. When the Empress Frederick was staying with the Queen, rye bread, of which the Empress is fond, was sent to the palace. The Queen's bakers have always been able to satisfy the Queen. She pays regularly once a month and does not demand Sunday baking. When some of Mr. Petrozywalski's customers have grumbled that they didn't get fresh bread Sundays, Her Majesty's forbearance was quoted, and this usually stops their complaints. The same baker also supplies the Princess of Wales and other members of the royal family, and although the Queen always has her confectionery and cakes made in her own kitchen, and the Princess of Wales and the Duchess of Connaught, who share the characteristics of having a sweet tooth, occasionally order lunch cakes and other good things. The Queen doesn't like freshly baked bread. It is always a little stale.

## COTEMPORARY COMMENT.

A great deal of nonsense is written about the soil being owned by farmers and of their having to pay the land taxes, etc. The best farming land will not equal in value other fine lands in any community. All mineral lands are immensely more valuable than farming lands. Land occupied by villages and small towns sells at prices ranging from \$500 to \$20,000 an acre, while farming lands in the same localities will not bring more than \$10 to \$50 an acre. A quarter section in the heart of a city is worth more than whole counties of farming lands. More significant still is the fact that even the farming lands are not owned by farmers, except in a limited degree. A large per cent. of farms in cultivation are owned by residents of villages and cities, while the farmer is a tenant. Nearly all unoccupied farming land is owned by non-resident speculators, railroad and land companies. Then to talk of the farm resident as having to meet all the adversity consequent upon low prices of grain is fiction. All kinds of business share alike in consequence of depression, except money loaning, which, like that of healing the sick, flourishes best where the malady it feeds on is the worst.—*Minneapolis "Market Record."*

The belief is growing stronger daily that "good times are coming." Business men generally express this sentiment. Handlers of grain predict that prices will rule higher this year than for many years past. The commercial leaders of the East write encouragingly to their correspondents in the West. They tell that the change is beginning to be felt and that it will soon sweep over the country. The signs of the times are that confidence is being restored to commercial and trade circles.—*Kansas City "Commercial."*

A London confectioner has placed on the market a menu card made of sweetened dough rolled out very thin. The bill-of-fare is printed on this with ink made of colored sugar. Having ordered the dishes you want, you amuse yourself while waiting for them by eating the bill of fare, which acts as an appetizer.—*Pittsburgh "Baker and Confectioner."*

How many farmers would be contented to live as they did in the "good old times" which they talk so much about? Farming is not an ideal occupation just now, but the farmer lives a good deal better now than he did twenty years ago.—*Chicago "American Elevator."*

## NEBRASKA MILLERS IN COUNCIL.

The State Millers' Association of Nebraska held a convention in Lincoln on the 15th and 16th of June. The convention was held in the parlors of the Capital Hotel. The first session was held on Thursday evening, and was attended by about thirty millers and others. O. A. Cooper, of Humboldt, presided, and D. H. Harris, of Bennett, acted as secretary. Roll-call showed the following members in attendance: O. A. Cooper, Humboldt; Z. I. Leftwich, St. Paul; W. H. Starr, Brock; F. S. Johnson, Milford; J. J. Tangeman, Talmage; G. H. Thory, Unadilla; Jaeggi & Schupback, Columbus; Paul Schminkes, Nebraska City; F. S. Schroeder, Syracuse; F. H. Briggs, Geneva; L. H. Milenze, Ithaca; Mr. Putnam, Gibbon; J. N. Paul, Omaha; J. W. Vieregg, Central City; D. H. Harris, Bennett. The milling press was ably represented by editor C. F. Hall of the "Modern Miller," Kansas City, Mo. The evening session was occupied in hearing and adopting the executive committee's report and in discussing the condition of the milling trade.

The concluding session was held on Friday forenoon. Discussion of the transportation question brought out the fact that flour is shipped upon the same rate as wheat, but corn-meal is charged 5 cents per 100 more than corn, and this fact has been causing considerable agitation among the millers. The association thought it best not to take any action yet on the matter. The session was short and the convention adjourned sine die.

NEARLY 200 corporations doing business in New York were incorporated in New Jersey, the reason being that in New Jersey the company pays one-tenth of 1 per cent. on its capital stock, while if incorporated in New York it would have to pay one-eighth of 1 per cent. on the same stock.



# LITTLE GIANT WATER WHEEL

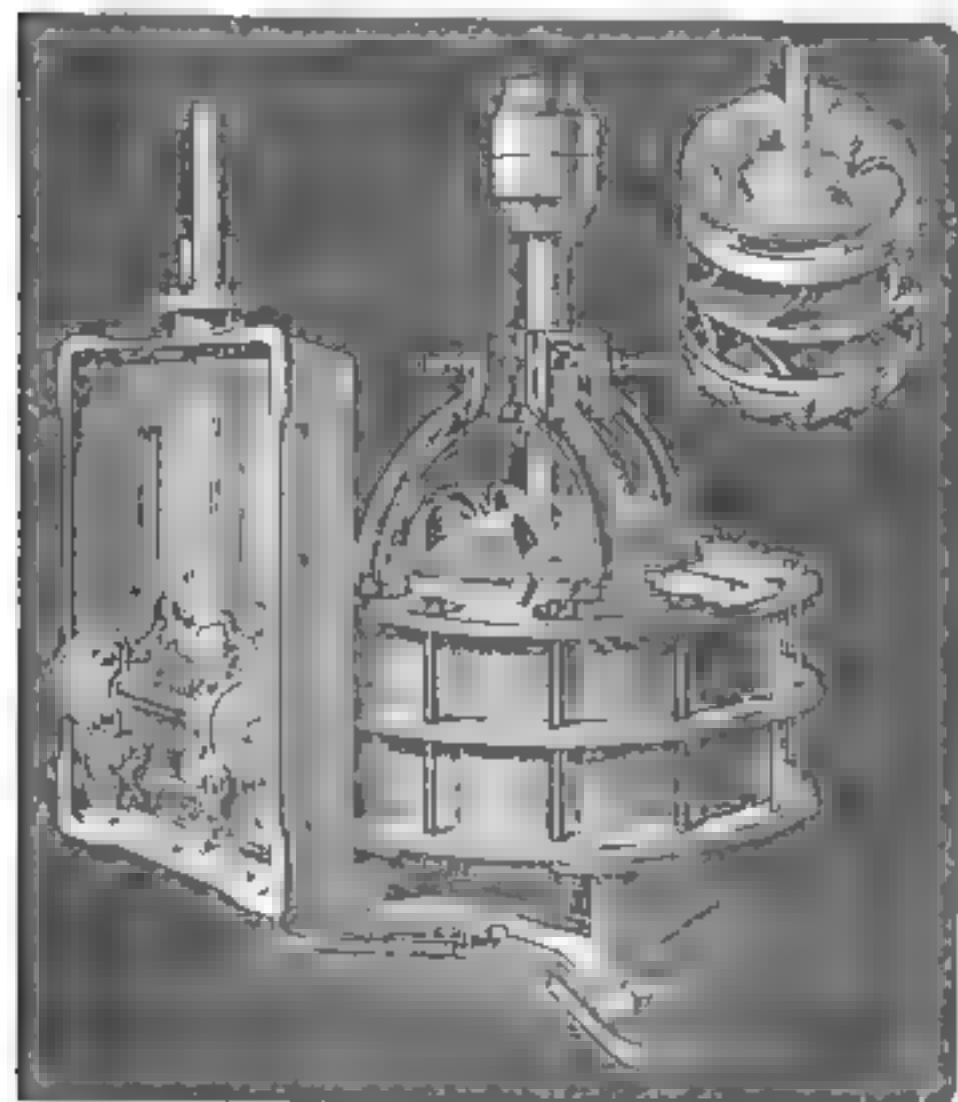
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## MUNSON BROS.

UTICA, - - N. Y.

Simple in Construction, Durable & Cheap.

**SEND FOR PRICES.**



# CAMERON STEAM PUMP

THE STANDARD OF EXCELLENCE.

*SIMPLE! COMPACT! DURABLE!*

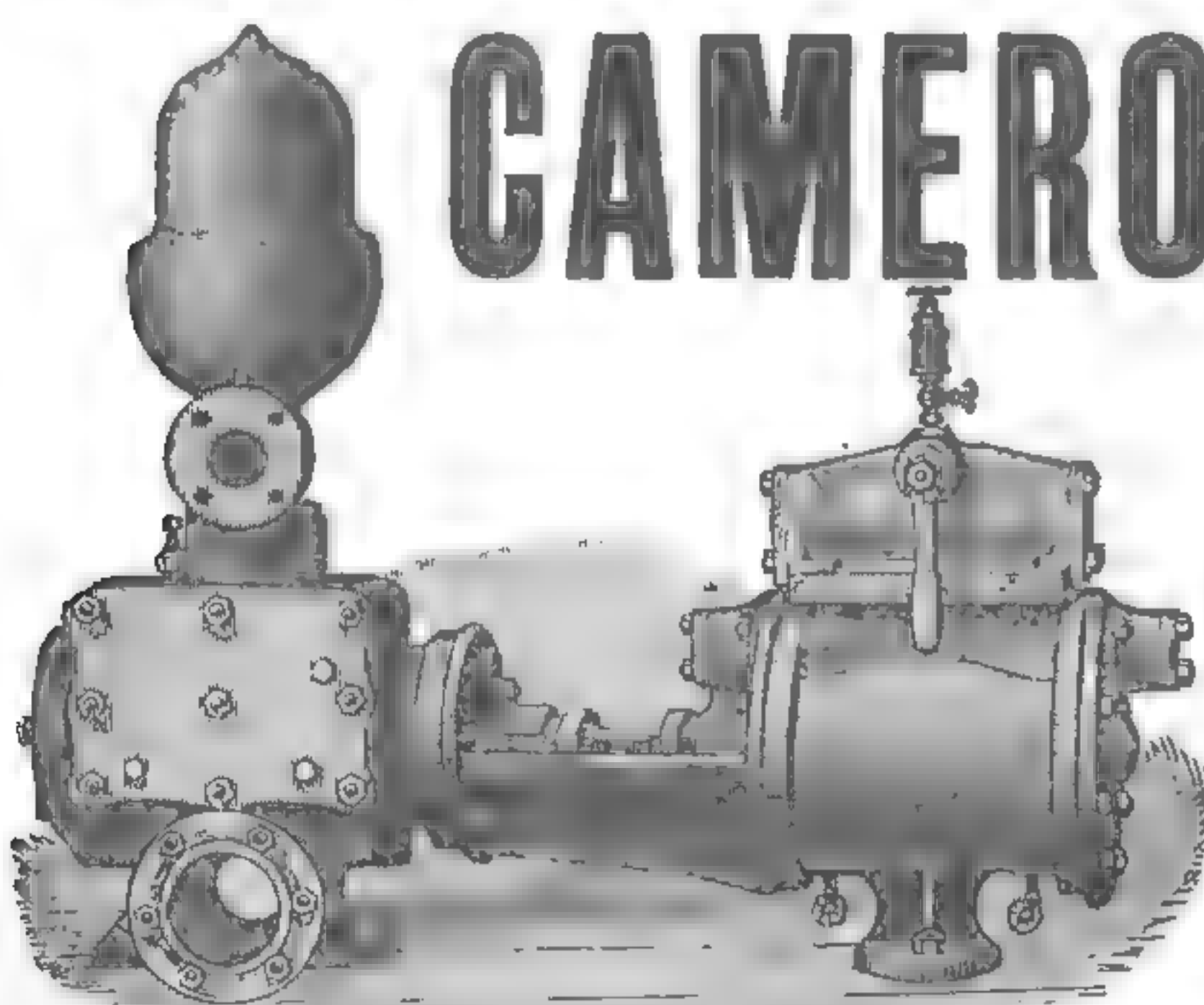
*"NO OUTSIDE VALVE GEAR."*

Steam, Air & Vacuum Pumps in Every Variety

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## THE A.S. CAMERON STEAM PUMP WORKS

Foot of East 28d Street, New York.



# SELF-CONTAINED STEAM ENGINES

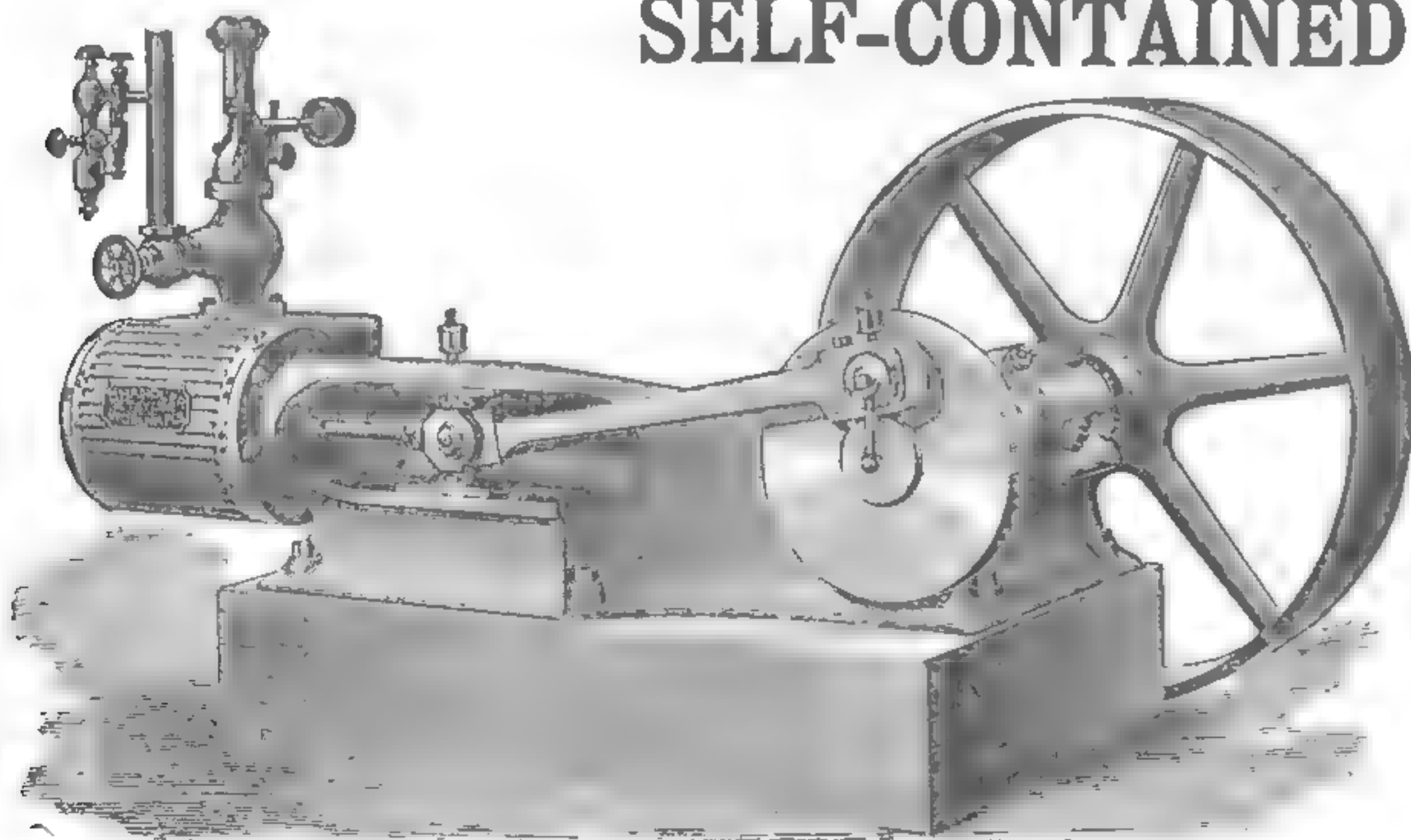
Stationary or  
Semi-Portable.

High Standard Maintained.  
Prices Greatly Reduced.

WRITE FOR NEW ILLUSTRATED  
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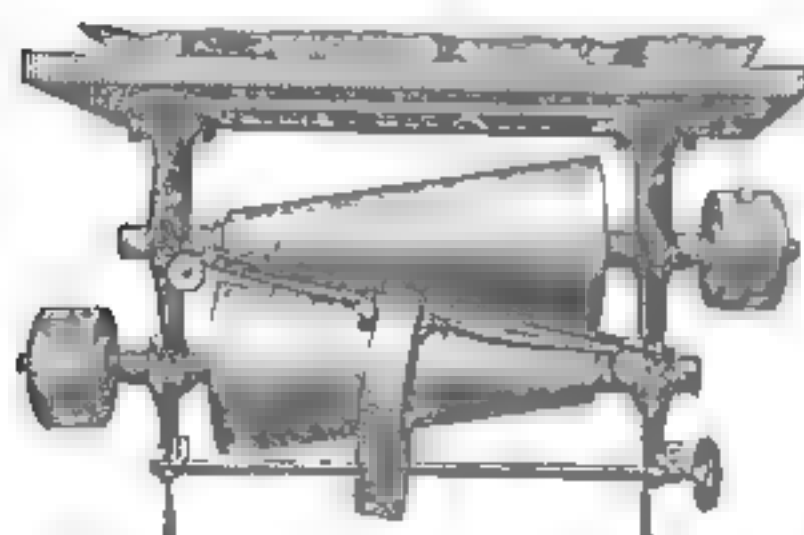
## Chandler & Taylor Co., Indianapolis, Ind.

Engines, Saw-Mills and Drain Tile  
Machinery a Specialty.

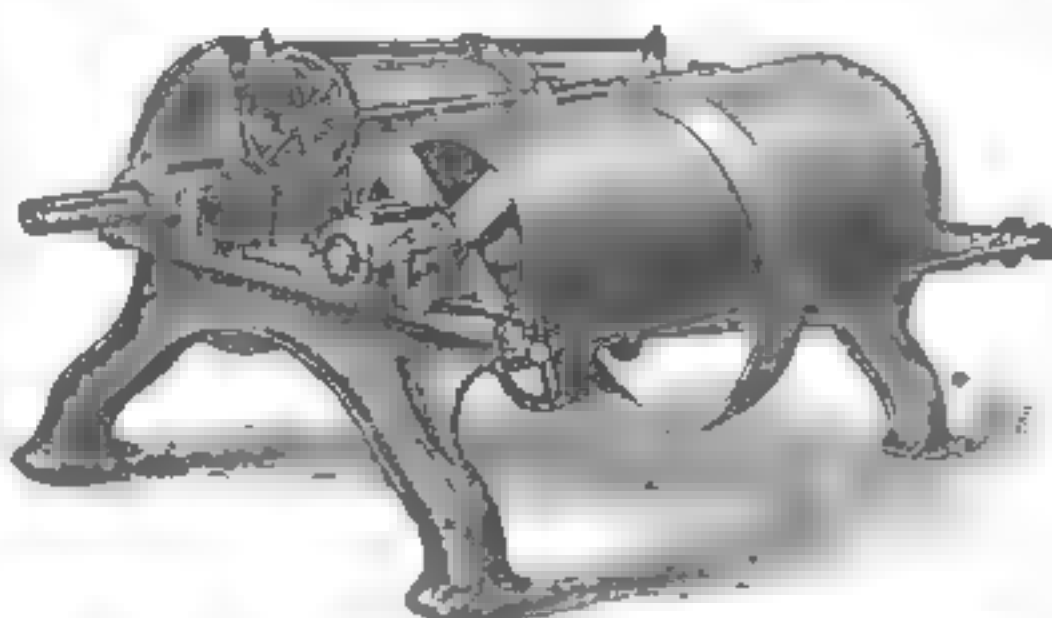


# THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



fluctuating. All sizes made from  $\frac{1}{2}$  Horse Power to 50 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.**

**EVANS FRICTION CONE CO., 85 Water St., BOSTON.**







OFFICE OF THE MILLING WORLD,  
BUFFALO, N. Y., May 24, 1890.

Friday of last week brought bad weather and crop reports from the West, together with good buying, making the markets active, stronger and higher. In New York May wheat closed at 98½c., with receipts at Atlantic ports 28,333, exports 24,797, and options 8,680,000 bushels. May corn closed at 41½c., with receipts 311,402, exports 254,076, and options 1,360,000 bushels. May oats closed at 34½c., with receipts 211,964, exports 40,126, and options 1,410,000 bushels. Wheat flour was dull, with buyers and sellers looking at one another over an impassable gulf. Receipts included 13,180 sacks and 25,879 barrels, and exports 21,479 sacks and 17,904 barrels. The following report on spring wheat was contained in a dispatch from Aberdeen, South Dakota: "The dual storm, the high winds and dry and cold weather have again plunged farmers into a condition of despondency. The situation is critical. Wheat is menaced by a double damage: all that is above ground will burn up or whip itself to shreds in the high winds, while much of later sown wheat can not germinate for lack of rain. It is certain that much damage was done by wind, which blew out the seed. The extent of this loss can not be determined till later, but farmers give very unfavorable reports. The only fortunate circumstance in the outlook is the fact that not to exceed 50 per cent. of the wheat is in sight. Rains and warm weather in the next few days would bring forward the late fields rapidly. The pastors have called a meeting for Saturday for prayers, confessing humiliation for rain."

Saturday brought further bad reports, and wheat was again higher, May closing at 99½c., with receipts 74,132, exports 140,733, and options 3,100,000 bushels. The bears denounced the crop reports from the Northwest as bogus, sensational and unreliable, but all day long the same bad reports kept pouring in from every quarter. The realizing by bulls was all that prevented a heavy upward turn in wheat. May corn closed at 41½c., with receipts 383,096, exports 205,941, and options 600,000 bushels. May oats closed at 34½c., with receipts 198,634, exports 36,221, and options 450,000 bushels. Wheat flour was stronger than ever, but buyers did not buy, and the bears asserted that the St. Louis and Minneapolis millers are "working the bad crop" business to advance their own interests. Receipts were 7,638 sacks and 25,355 barrels, and exports 12,893 sacks and 8,034 barrels. The minor lines were strong, but quiet.

Monday brought mixed weather reports, with most of them showing improved conditions in Minnesota and the Dakotas, where both rain and snow fell on Saturday and Sunday. The St. Paul Chamber of Commerce reported the "crisis" passed, so far as spring wheat was concerned. As a result wheat dropped several points. May wheat closed at 98½c., with receipts 143,226, exports 163,239, and options 3,100,000 bushels. Winter-wheat crop reports were not at all improved. May corn closed at 40½c., with receipts 527,153, exports 557,871, and options 1,480,000 bushels. May oats closed at 33½c., with receipts 282,300, exports 70,427, and options 530,000 bushels. Wheat flour was held at old prices, despite the drop in wheat. Exporters dealt some in winters and bakers' extra springs. At prevailing prices for wheat, standard patent springs can not be produced at less than \$5.75. Receipts included 6,222 sacks and 40,804 barrels, and exports 12,701 sacks and 15,112 barrels. The minor lines were quiet. The visible supply in the United States and Canada was:

	1890.	1889.	1888.
Wheat.....	May 17. 22,694,974	May 18. 22,342,701	May 19. 29,022,228
Corn.....	11,096,248	9,691,944	6,960,049

Oats.....	4,398,841	6,750,301	4,518,697
Rye.....	961,033	1,301,176	261,640
Barley.....	688,471	601,676	483,588

Tuesday brought weaker and lower markets, with slow trade, and closing stronger on bulling by St. Louis dealers. May wheat opened at 97½c. and closed at \$1, with receipts 129,957, exports 76,788, and options 4,000,000 bushels. Rains reported in the Northwest and heavy reported Russian shipments weakened wheat, and later in the day bad winter-wheat reports and heavy buying in St. Louis recovered the loss. The conflicting reports made the markets nervous. May corn closed at 40½c., with receipts 234,733, exports 146,556, and options 688,000 bushels. May oats closed at 33½c., with receipts 276,084, exports 87,689, and options 483,000 bushels. Wheat flour was held at nearly old prices, but holders appeared to be willing to shade prices on low-grades under spring patents and winter superfines. Receipts were 14,900 sacks and 34,891 barrels, and exports 9,329 sacks and 12,114 barrels. The minor lines were quiet and unchanged.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890.	1889.
Wheat and flour, qrs....	May 20. 2,853,000	May 21. 1,635,000
Corn, qrs.....	714,000	.....

The following shows the amount of wheat and corn on passage to the Continent for the past week and for the same week last year:

	1890.	1889.
Wheat, qrs.....	May 20. 880,000	May 21. 862,000
Corn, qrs.....	409,000	150,000

Shipments India wheat to U. K. .... 65,000  
do do Continent.. 17,500

The imports into the United Kingdom for the past week, the previous week and for the same week in previous year were as follows:

	1890.	1890.	1889.
Wheat, qrs.....	May 6. 270,000	April 29. 171,000	May 7. 134,000
Corn, qrs.....	334,000	303,000	207,000
Flour, bbls.....	230,000	212,000	176,000

Wednesday was a day of excited and unsettled markets. Wheat broke early on reports of rains and warmer weather in the West and Northwest, rallied on bulling by Hutchinson in Chicago, and again weakened on heavy sales by Hutchinson. May wheat closed in New York at \$1.01, with receipts 296,165, exports 16,895, and options 5,440,000 bushels. May corn closed at 40½c., with receipts 448,281, exports 381,630, and options 1,300,000 bushels. May oats closed at 34½c., with receipts 231,349, exports 164,152, and options 350,000 bushels. Rye grain was in fair demand for choice, at 59½c. for western, 58½c. for Canada, 59c. for State afloat, and 57c. for car-lots on track. Barley was firmly held, with State and western nominal and Canada at 60c. Malt was nominally 62½c. for 2-rowed State, and 72½c. for 6-rowed State, and 75c. for Canada. Mill-feed was in small supply for desirable grades, and was held firmly at 85c. All kinds were quoted at 80c. for the range.

Wheat flour was slow, with buyers holding off, with few orders either for home or export trade, and these for small lots, while millers' limits were as high and as firm as ever, with no disposition to buy lines or anticipate wants in any grade, while the millers' showed as little to yield in prices. It was a stand-off between them to see which would tire or starve out first; while Europe and the West Indies had good stocks and only the Provinces were taking low grades. Receipts included 10,341 sacks and 23,663 barrels, and exports 9,543 sacks and 34,570 barrels. Sales were made at the following prices: Small lots straight winters at \$4.65@4.90, the latter fancy. Straight Southern sold at \$4.50; a line of choice Ohio clear at \$4.60; extra No. 2, in sacks, \$3.25 for a choice flour, though some common in barrels were offered at \$3.15 and not sold; common spring "Red Dog" at \$1.65 for export; winters at \$4.40@4.75 for clears and straights; fair winter patent \$5.00@5.25; sacks

no grade spring \$1.60; barrels choice Western straights \$4.80, barrels spring fine \$2.10; extra No. 2 winter, in barrels, at \$3.25, and \$3.35 for choice, or 10c. up, as the limits on this grade as well as on winter straights were raised that much, and in some cases on spring patents; while fancy brands in fair lots were bid 10c. more in some cases, yet still about 10c. under the asking prices; \$5.50@5.60 was all that can be got in small lots; while \$5.65@5.75 was asked for standards and most fancy brands; city mills \$4.35@4.40.

Rye flour was dull at \$3.00@3.25, with small sales. Corn products were dull at the following quotations: Coarse bag meal 79c. @81c.; fine yellow 92c. @95c.; fine white \$1.00; Southern 85c. @ \$1.40 for common to fancy; Southern and Western in barrels \$2.35@2.45; yellow granulated \$2.60@2.65; white do \$2.70@2.75; flour \$3.00@3.55; Brandywine \$2.55.

Thursday brought but little change. May wheat closed down at 99½c., with receipts 79,000, exports 62,000, and options 7,496,000 bushels. May corn closed at 40c., with receipts 175,000, exports 88,000, and options 184,000 bushels. May oats closed at 34½c., with receipts 96,000, spot sales 158,000, and options 405,000 bushels. Wheat flour was weak and steady, with receipts 17,000 and sales 19,000 packages. Quotations were: Low extras \$2.50@3.00; city mills \$4.35 @4.60; city mills patents \$5.10@5.65; winter wheat low grades \$2.50@3.00; fair to fancy \$3.15@5.00; patents \$4.50@5.75; Minnesota clear \$3.65@4.65; straights \$4.10@5.16; patents \$4.40 @5.75; rye mixtures \$3.65@4.35; superfine \$2.00 @2.85. The minor lines were generally quiet and steady. The Minneapolis output of flour last week was 129,740 barrels, and prices were advanced 5@10c. during the week. Business was poor.

#### BUFFALO MARKETS.

WHEAT—The market opened firm at \$1.00½ for No. 1 hard, and closed higher with sales of 5,500 bushels at \$1.00½; 8,000 bushels No. 1 Northern at 99c and 2,000 bushels at 99½. Winter wheat was irregular, sales being reported of 50,000 bushels No. 2 red at 99½c and 16,000 bushels do at 99c. Two carloads were sold at 98c, and 1 car of No. 3 extra red at 97½c. At the close No. 2 red was held at \$1.00, and No. 1 white at 99c. CORN—The market went up a little after a weak opening. Sales of No. 2 corn were made at 37½c, 37½c, 37½c, and 38c. At the close No. 2 yellow was held at 38½c and No. 2 corn at 37½c@37¾c. OATS—Several cars of No. 2 white were sold at 83½c, and a little at 84c. at which figure they closed. No. 3 white sold at 82½c@83c and 6 cars of No. 2 mixed brought 82c and a little reached 82½c. The market closed steady. RYE—Prices in this market are nominal at 85c for No. 2 in store. BARLEY—Little is done in this market. Quotations are nominal at 65@66c. for No. 2 Canada and 57@60c for No. 3 do. OATMEAL—Akron, \$5.45; Western, \$5.25 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 75@85c.; fine, 80@90c.; granulated, \$1.50 per cwt. MILLFEED—City-ground coarse winter, \$14.50@15.00 per ton; fine do. \$14.50@15.50; finished winter middlings, \$15.00@16.00; coarse spring do, \$14.00@14.50.

#### FLOUR MARKET.

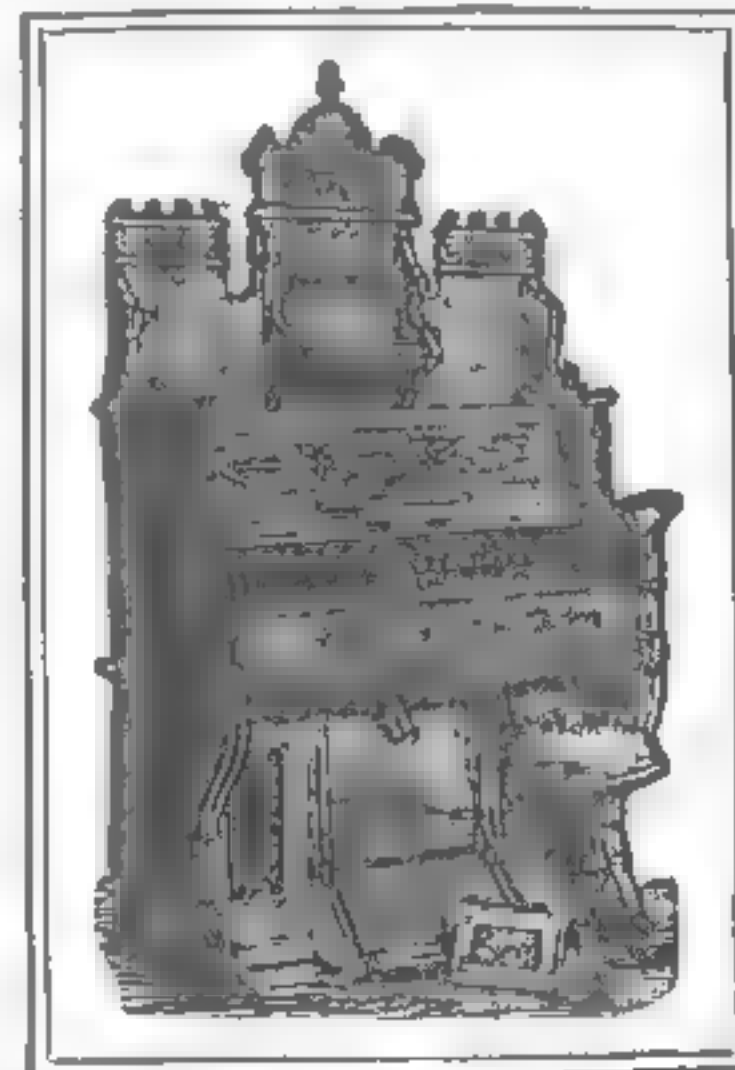
Spring Wheat.		Winter Wheat.	
Patents.....	\$6.50@7.00	Patents ..	\$5.50@6.00
Straight.....	5.25@5.75	Straight..	5.25@5.75
Bakers.....	4.75@5.25	Clear ....	5.00@5.50
Red Dog....	2.50@3.25	Low grades .	8.00@4.25
Rye flour....	3.75@—	Graham....	4.50@—

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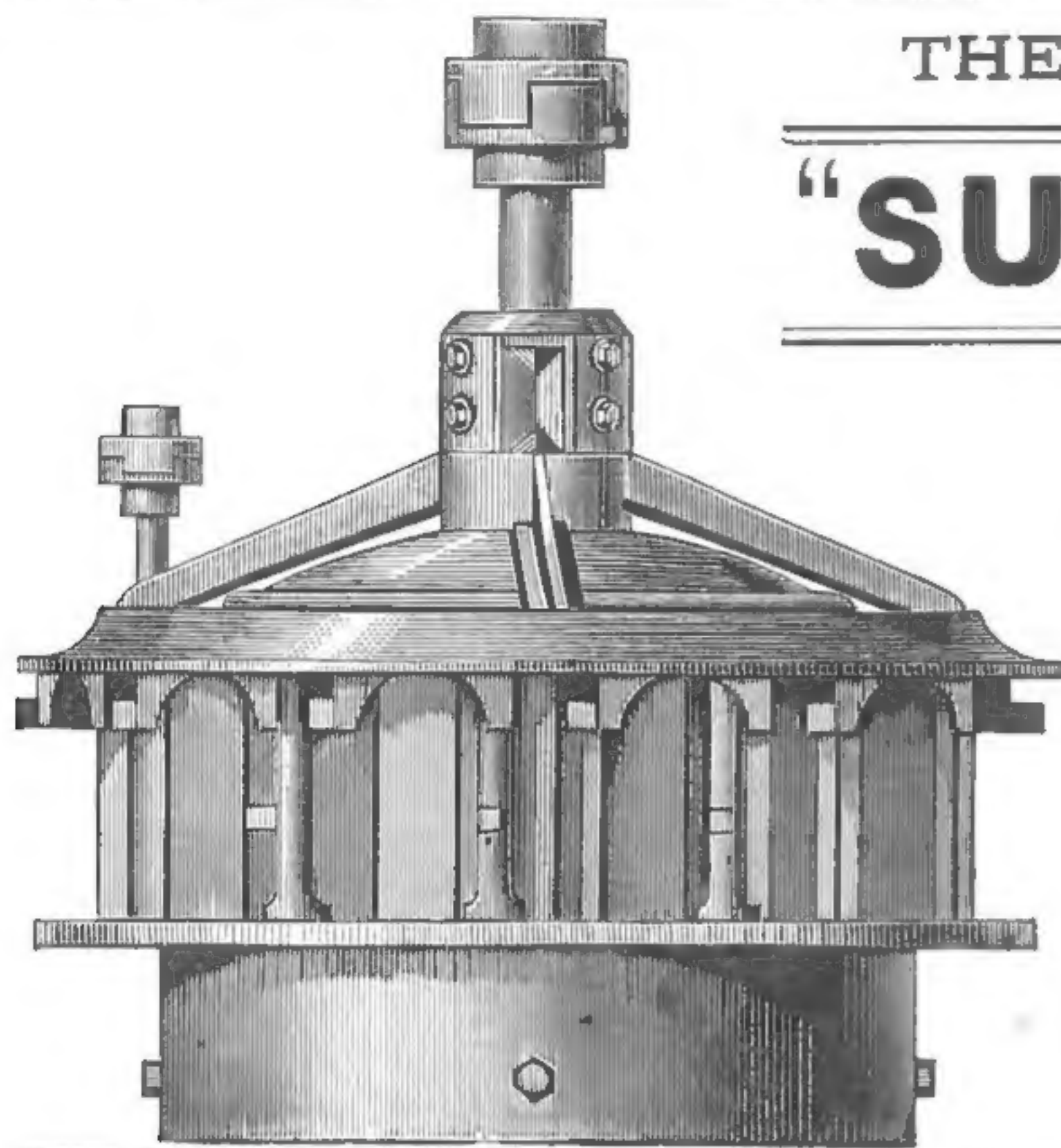
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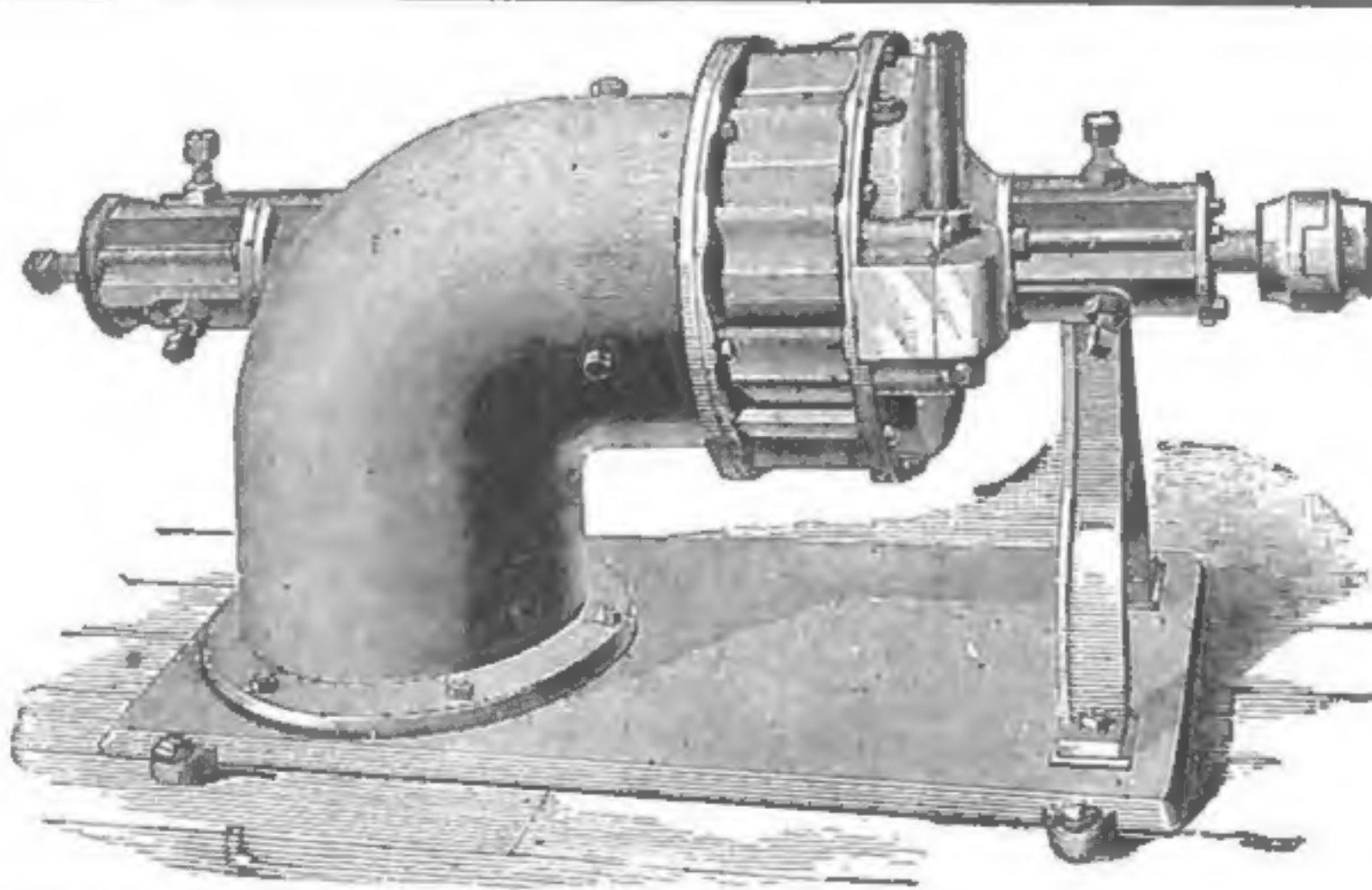
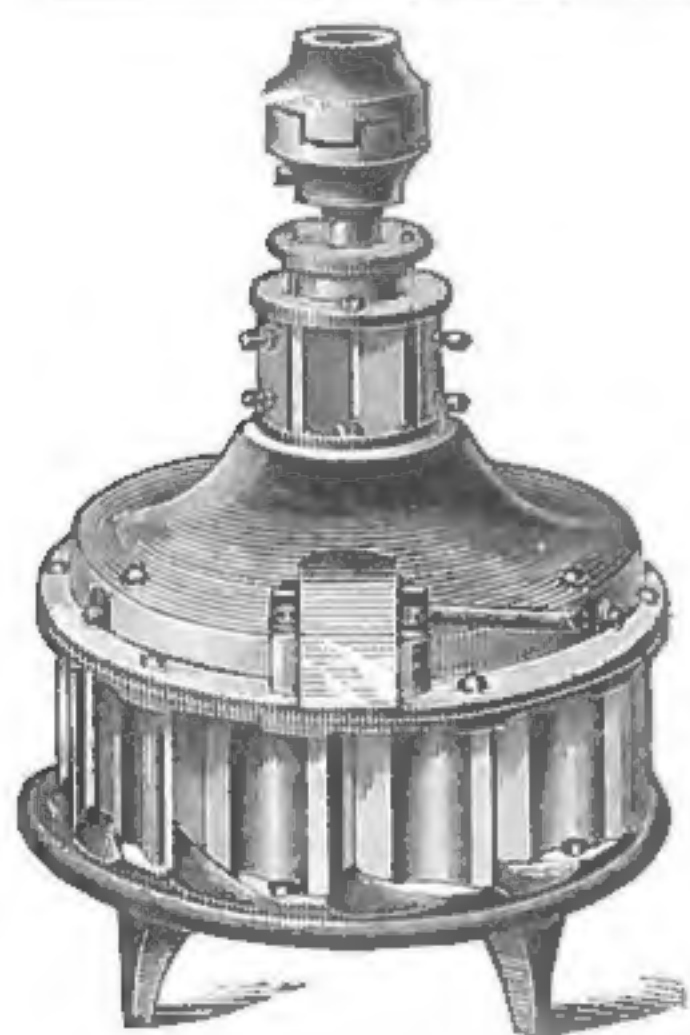
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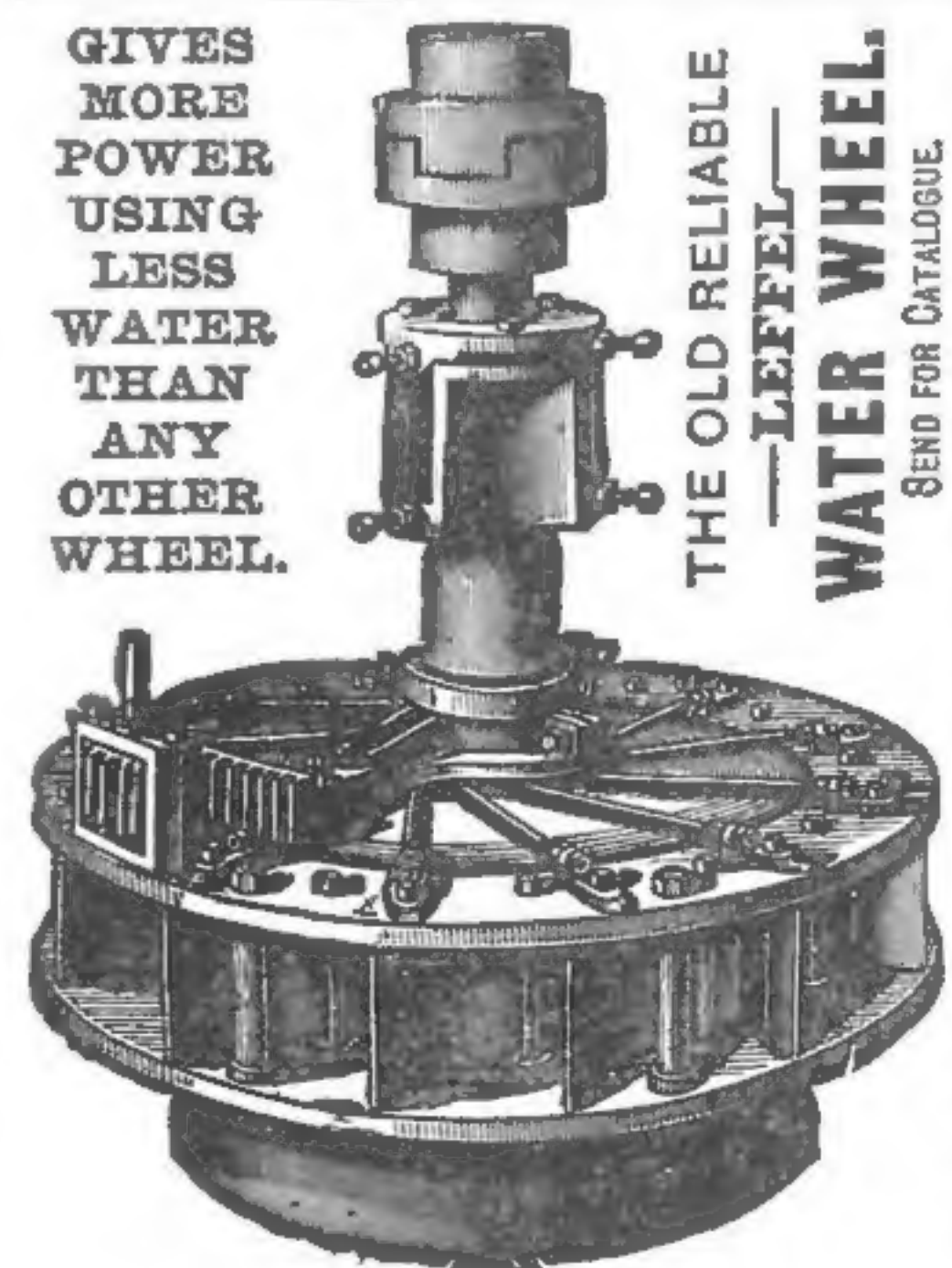
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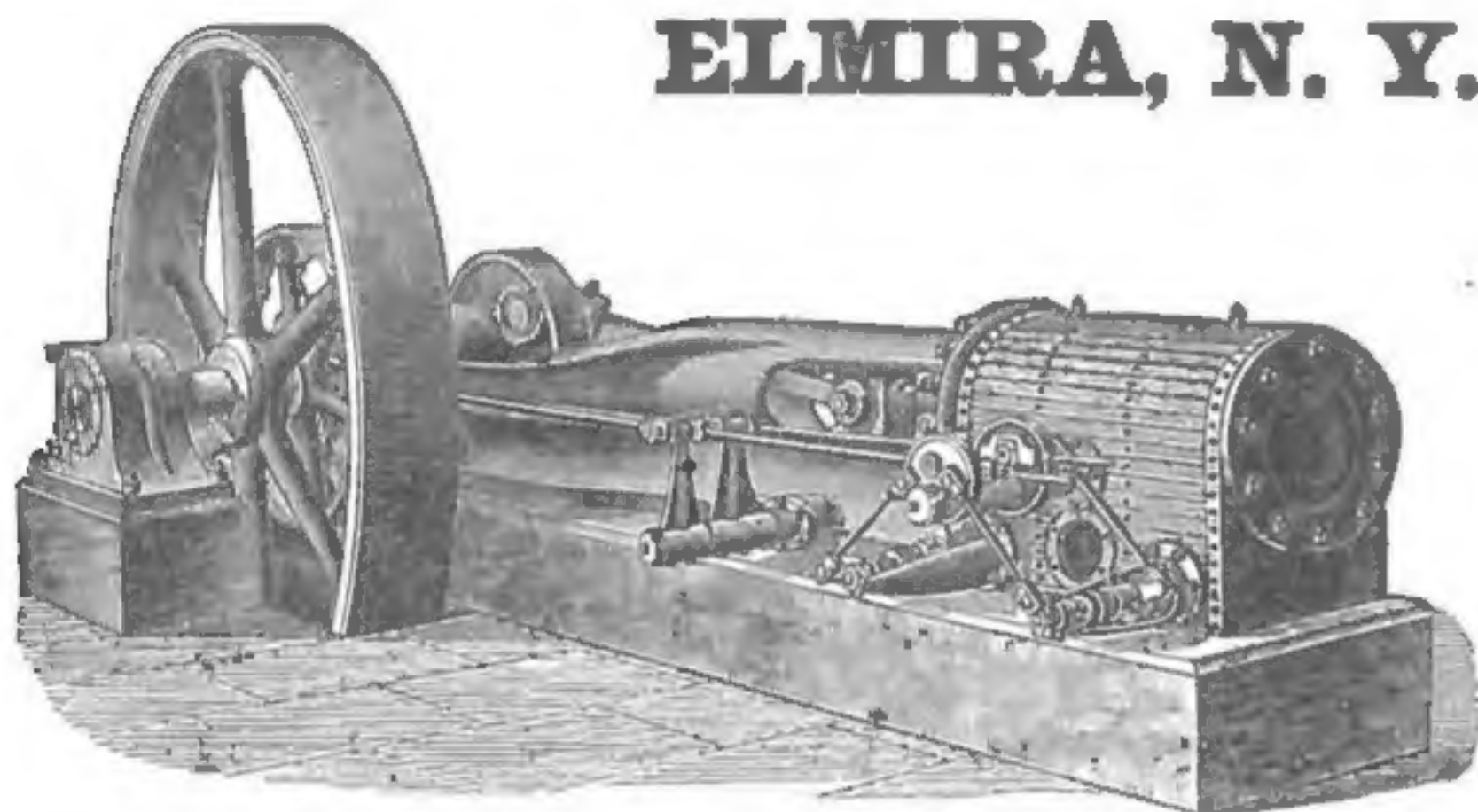


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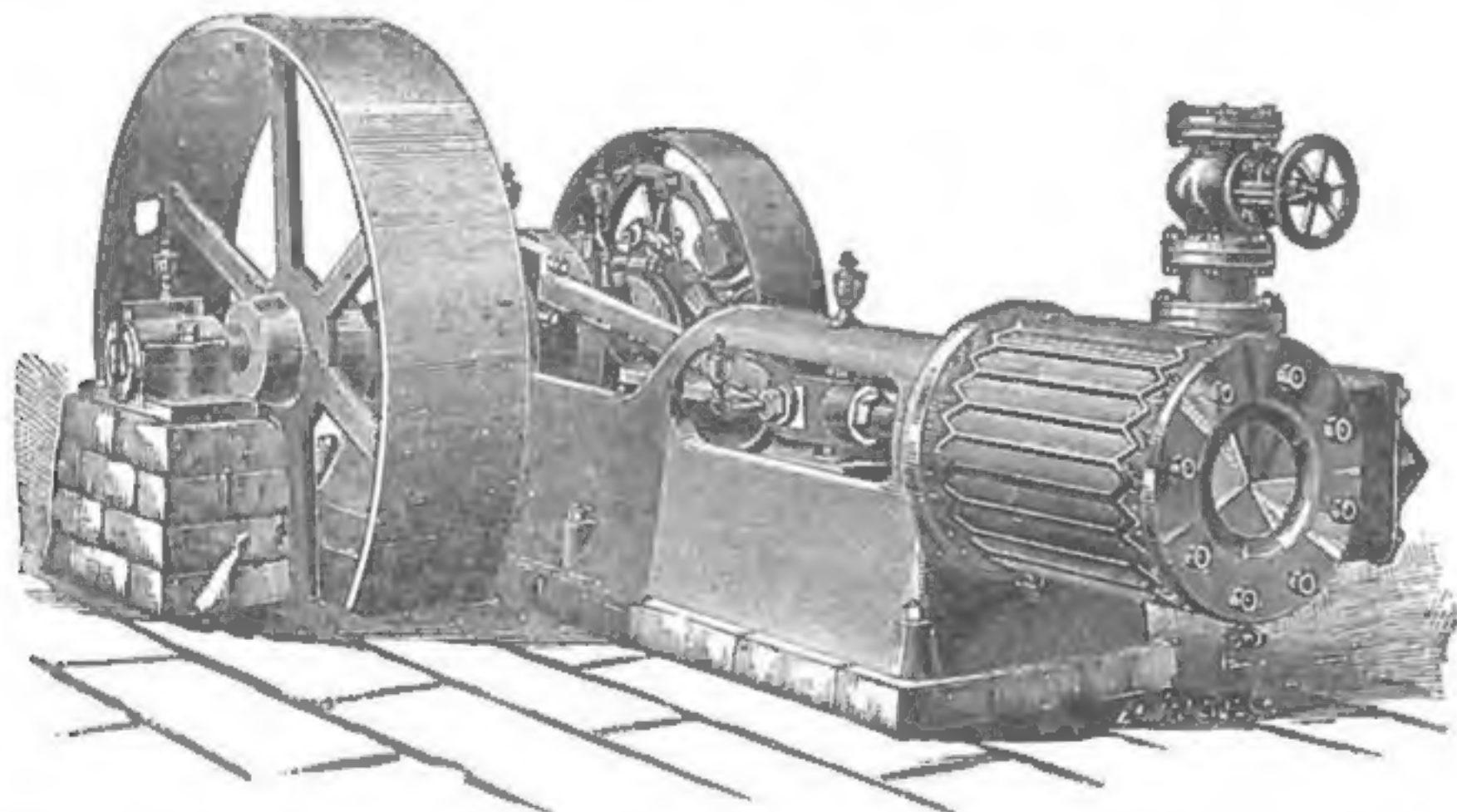
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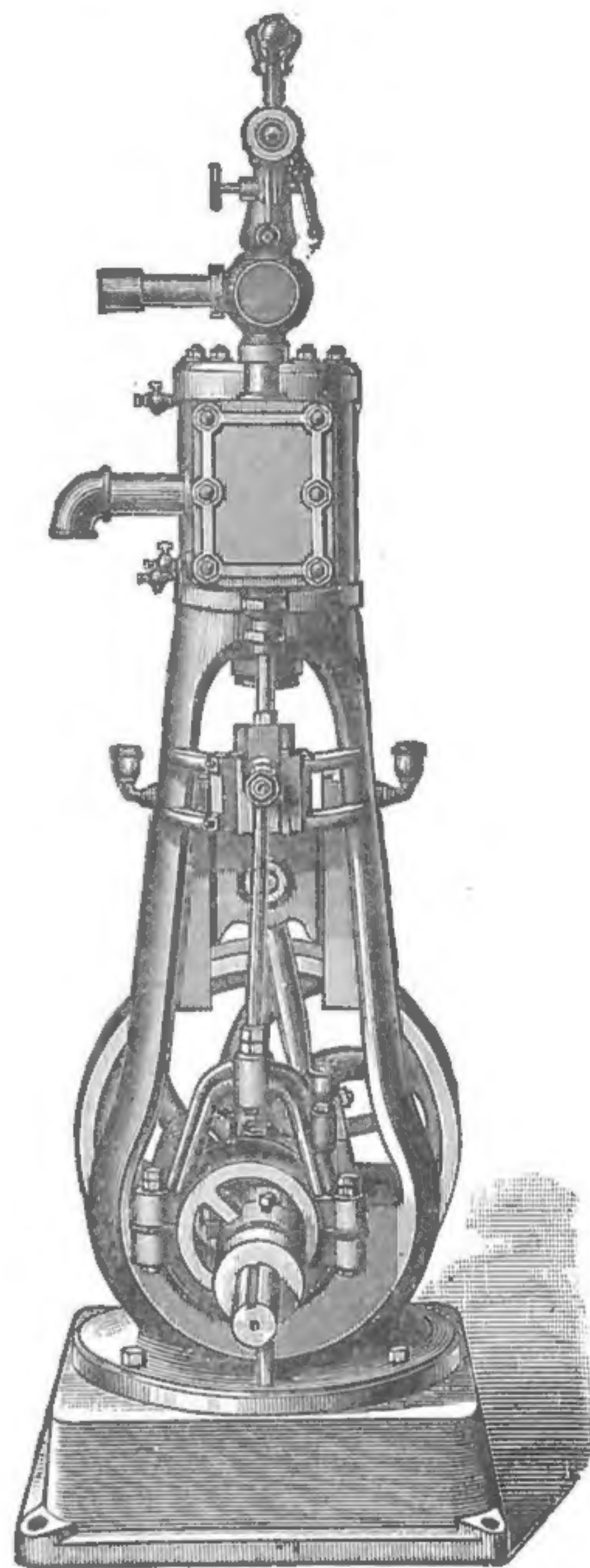
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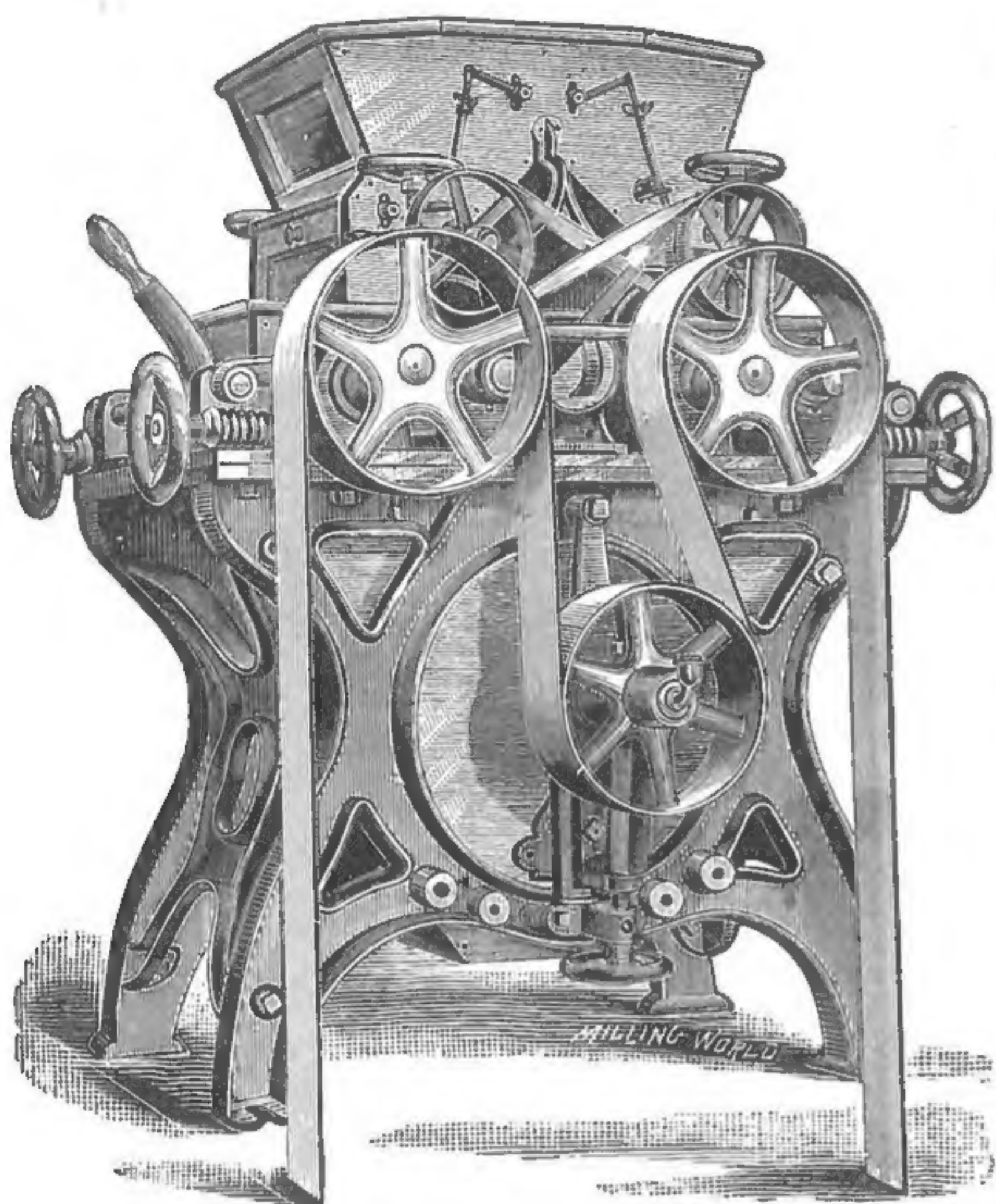
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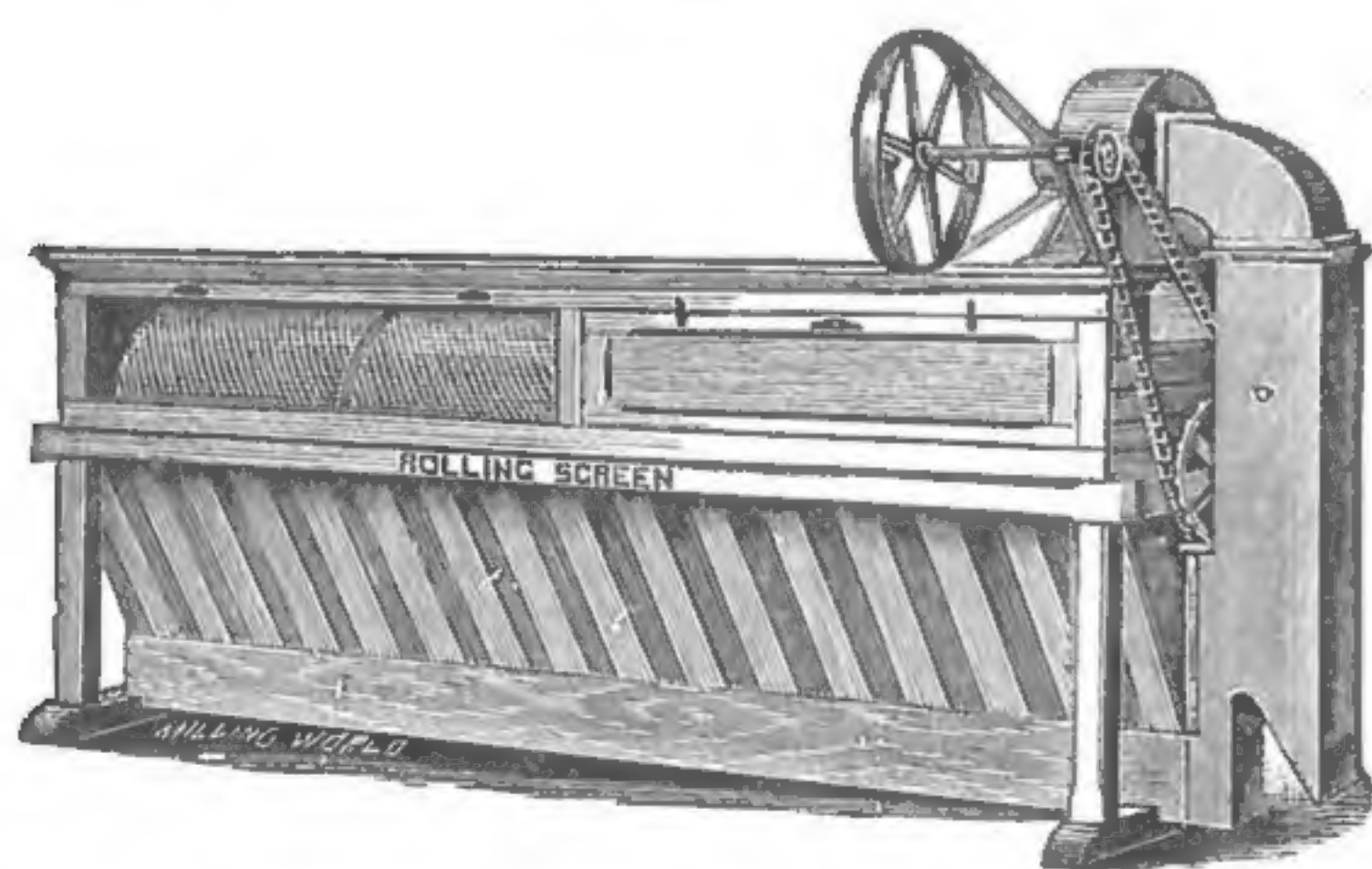
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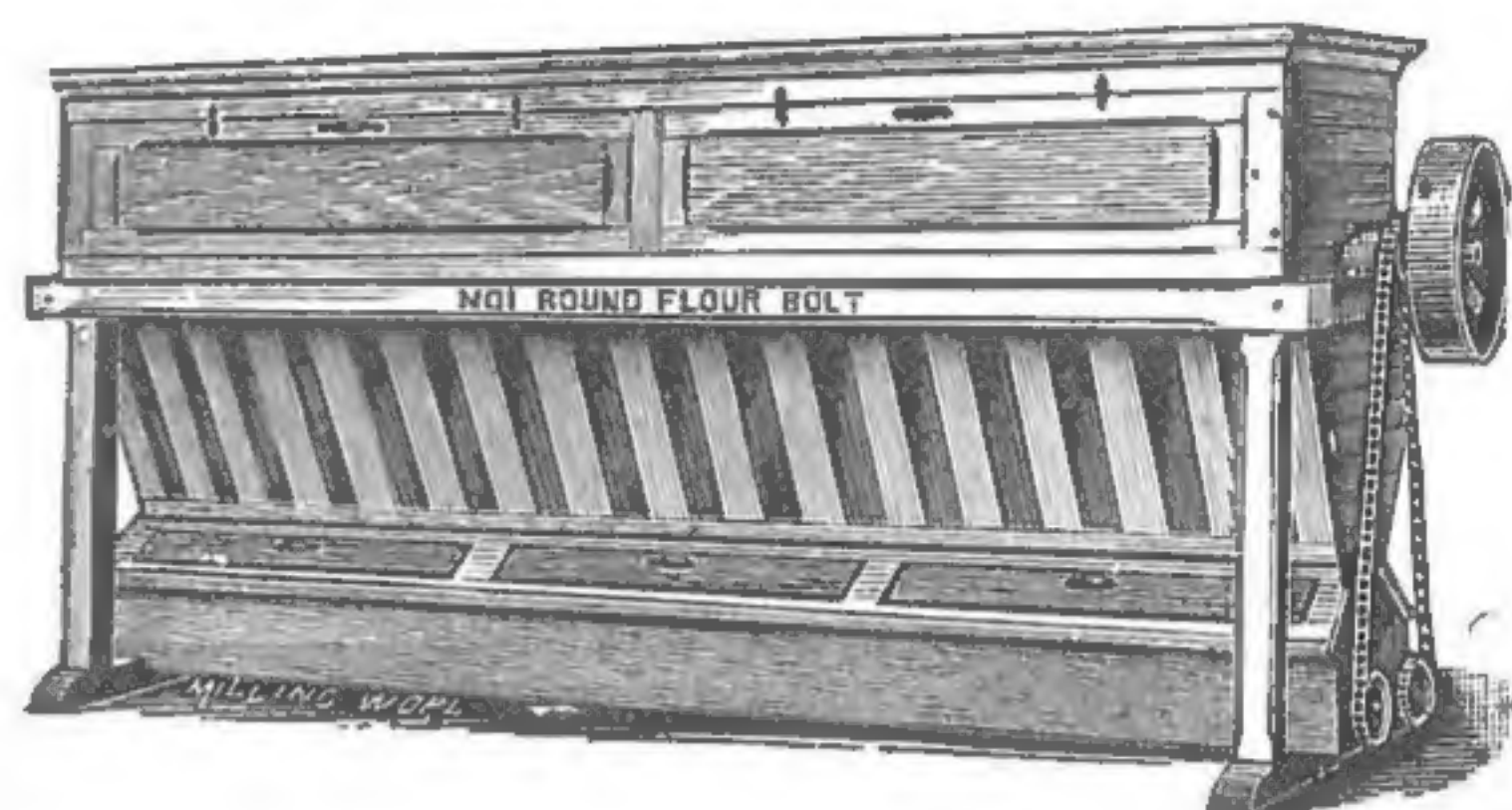
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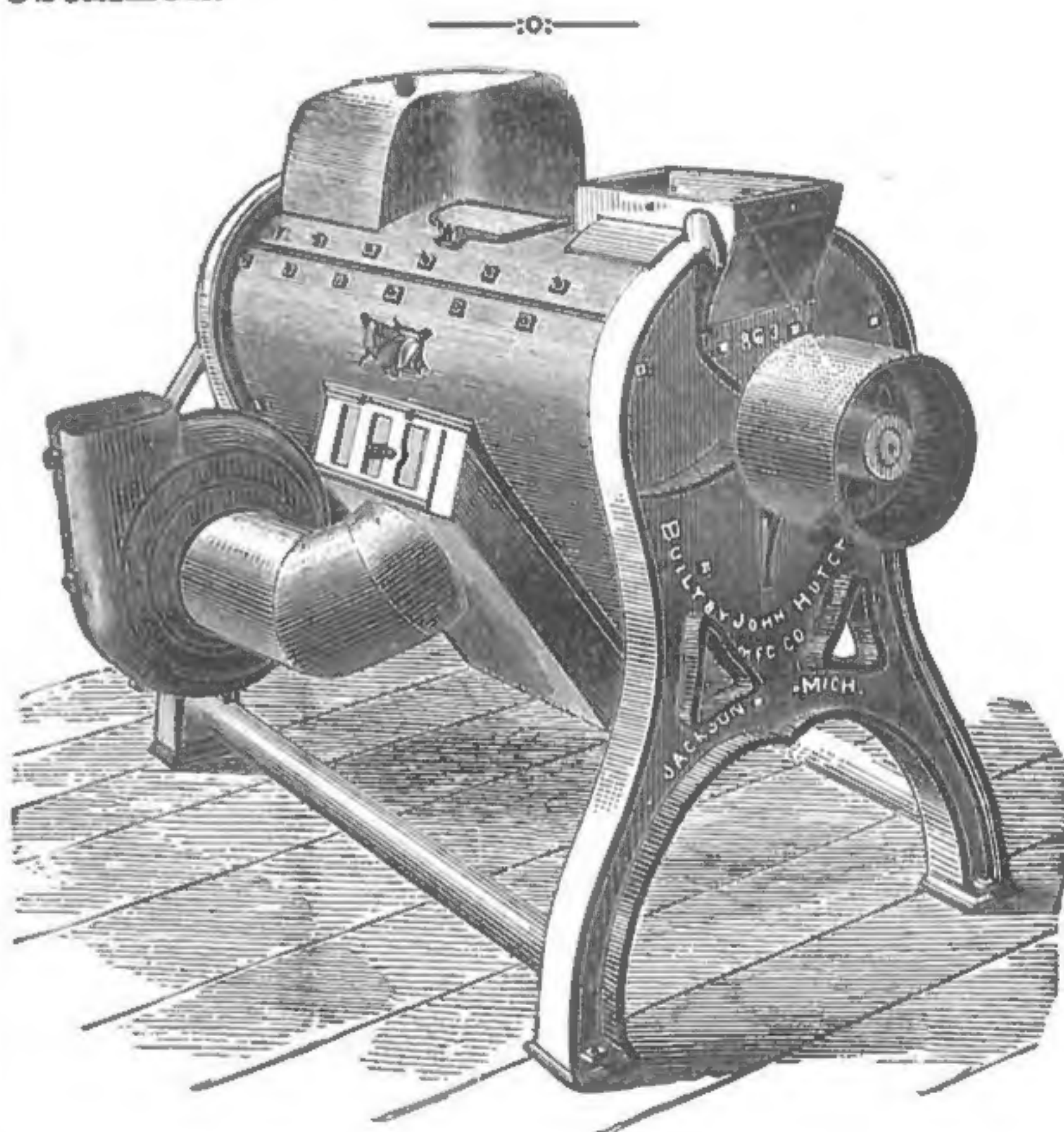


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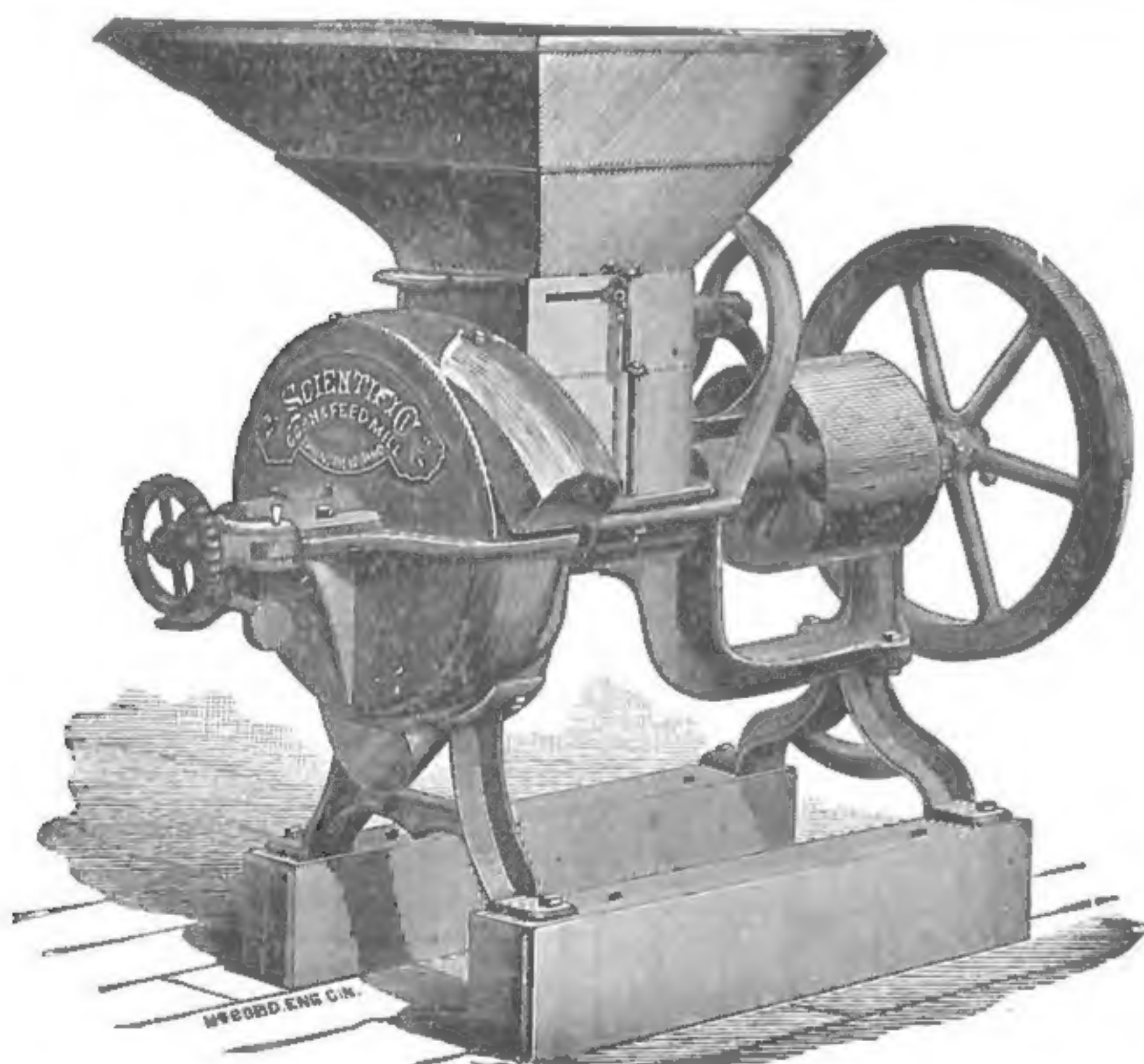
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